

Preliminary Land Development Plan

for the

ALMONO SITE

Hazelwood Neighborhood, 15th Ward, City of Pittsburgh, Pennsylvania
Submission to Department of City Planning for SP District Zoning

May 7th, 2013



ACKNOWLEDGEMENTS

The Almono Limited Partnership, started by four southwestern Pennsylvania Foundations, purchased a 178-acre industrial site in Hazelwood to see that it was developed into a sustainable riverfront community.

Almono LP envisions this site as four distinct interconnected districts with a range of allowable uses and each with unique and meaningful places. The 178-acre site is intended to be strongly connected to the distinct surrounding neighborhoods, infrastructure, and landscape.

The Vision Plan for the site was completed in October 2011. Beginning in November 2011, the managing partner, the consultant team, and various governing agencies met regularly to discuss the goals, content and process for development of this site. As the site engineering began to be developed, the Preliminary Land Development Plan and Specially Planned District submission was prepared to establish parameters of design and the intended site systems in greater detail.

Almono Limited Partnership

Claude Worthington Benedum Foundation
Howard Heinz Endowments
Strategic Regional Developments, Inc.
RIDC Southwestern Pennsylvania Growth Fund

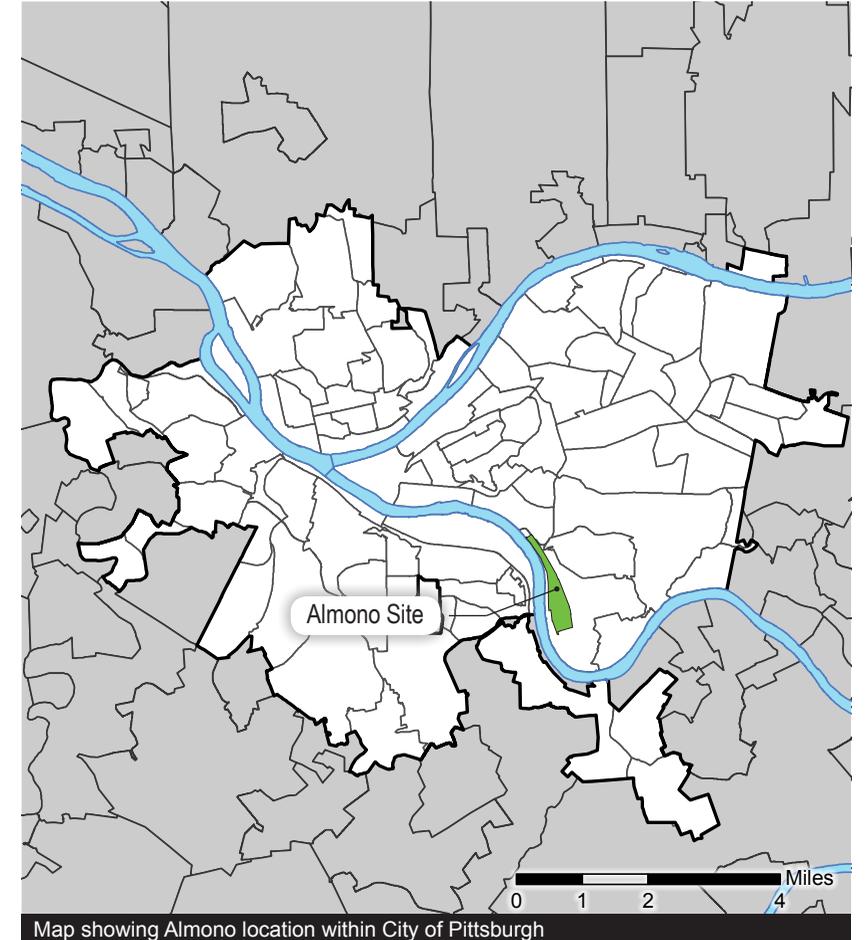
Consultant Team

Rothschild Doyno Collaborative, Urban Design
Andropogon Associates, Landscape Design
GAI Consultants, Civil and Transportation Engineering
Trans Associates, Transportation Engineering

All photos in this document are by Rothschild Doyno Collaborative or Andropogon Associates unless otherwise noted.



The 178-acre site is schematically outlined in green

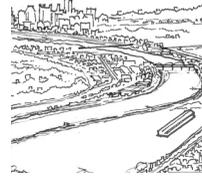


Map showing Almono location within City of Pittsburgh



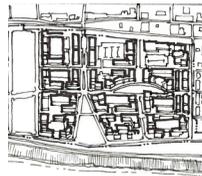
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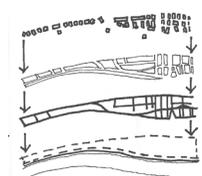
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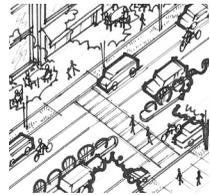
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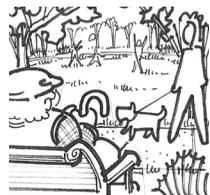
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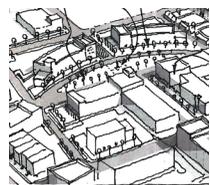
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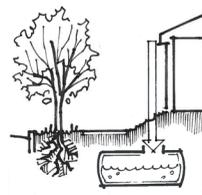
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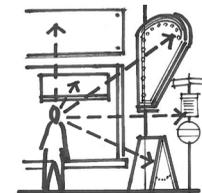
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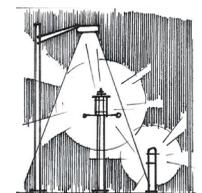
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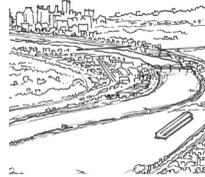
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SECTION 1.1

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PURPOSE AND INTENT

Purpose

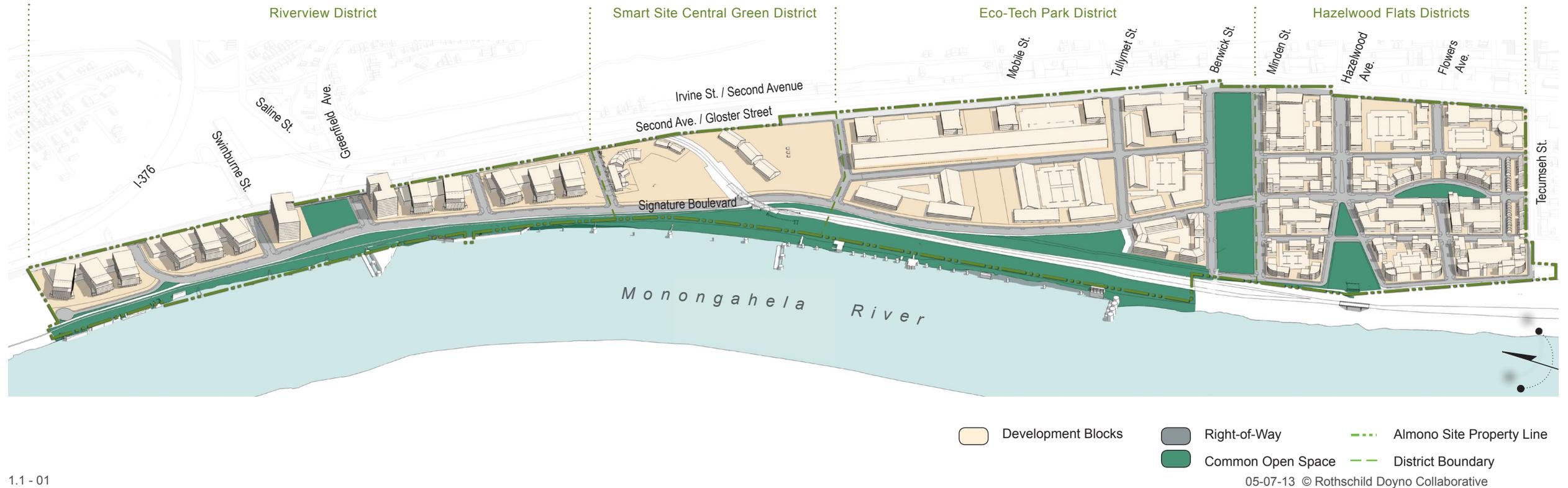
This Preliminary Land Development Plan (PLDP) is submitted in support of the Almono proposal for the creation of a Specially Planned (SP) District pursuant to Section 909.01 of the City of Pittsburgh Zoning Code. The PLDP establishes the general intent for this site in order to attract and direct development that aligns with and will advance the Almono goal of having this vital urban riverfront property serve as a catalyst for positive change of regional significance. Because specific property development circumstances are not yet known,

the purpose of this document is to articulate the general intent necessary for individual site developments to advance the broader goals for the overall site.

Organization and Intent

The site's future disposition will be comprised of three primary types of land: Rights-of-Way, Open Space, and Building Development Parcels. This document defines the development patterns for these three land types appropriate to guide ongoing property development.

The PLDP envisions and articulates a wide array of site systems necessary to advance the site. The PLDP outlines the process and intention for development, and establishes four zoning districts, each with its own mixture of places, uses and forms.



What We Heard

ESP Framework

To differentiate the considerations needed to advance this site’s development, this planning document arranges issues into Economic, Social, and Physical (ESP) categories.

Synthesis and Process

This document will serve as a general guide for individual projects that pursue Final Land Development Plans for elements of this site. The intent is that individual projects will articulate and share the manner in which their design proposals advance the Vision for the greater site. Communicating development intent by linking proposals with the various organizing structures (land types, ESP framework, etc.) will be encouraged when appropriate.

Because the goal for this site includes improving opportunities in the surrounding neighborhood, design processes that are open and progressive will allow for greater connection between “on-site” and “off-site” improvement and, where appropriate, the development of collaborative solutions.

Document Limitations

The PLDP provides a general vision for overall development of the site and requirements for project development. Almono LP reserves the right to further refine its vision as it pursues financing approvals from other governmental agencies, and attracts investors to develop components of the site. Almono LP also anticipates imposing additional private restrictive covenants consistent with its vision.

The renderings included in this PLDP represent what could be constructed under the proposed regulations.

Specific building designs, building layouts, and architectural details will be determined at the time of Final Land Development Plan (FLDP) submission. Lot Diagrams and District Intent Diagrams in the PLDP are provided for illustrative purposes only and should not be construed as proposing and are not intended to require a specific lot or building configuration.

Use and other restrictions on specific development sites within each of the four districts will be articulated and enforced through the City ordinance adopting the SP

District and any subsequently approved FLDP(s) and Subdivision Plan(s). In addition, the PLDP establishes a set of development requirements for accomplishing the Almono LP vision. Other portions of the PLDP are advisory in nature only. In order to assure the integrity of the SP process, material deviations from the development requirements of the PLDP, as determined by the Zoning Administrator, will require an amendment to the PLDP, which may be processed concurrently with the FLDP.

ALMONO VISION
WHAT WE HEARD
 Partnership Meeting 1, February 11, 2010.



ECONOMIC:

- Provide site amenities supported by properties that **generate tax revenues**
- Do **not overly subsidize** to achieve success
- **Attract developers** to invest and pursue projects
- Incorporate for **profit and non-profit** entities into the planning and use of the site
- Participate in changes in the **energy economy**
- Generate **reinvestment** in the area surrounding the site

SOCIAL:

- Be **welcomed** by and collaborate with the existing communities
- **Build synergies** by serving a wide range of interests and needs
- Attract a **diversity of groups** to participate in change making
- Provide **access to the river** for all people
- **Attract new people** to the site and to the surrounding neighborhoods

PHYSICAL:

- Learn from visionary precedents
- Plan transportation as both local and regional, for the short & long-term
- Use best-practices in **sustainable site and building design**
- Advance **alternative energy systems** over time
- Propose **imaginative reuse of existing buildings**
- Provide a **mixture of uses** appropriate to distinct locations
- Create a **unified vision**

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Types of Land

Section 2 of this document defines the vision for site-wide systems that will reside on Rights-of-Way, Open Spaces, and Building Development Sites.

Rights-of-Way are intended to connect people and places through road and trail networks that serve diverse mobility and access needs for all. An active and vibrant streetscape promotes interaction between people. Rights-of-Ways include infrastructure and natural systems that manage and treat stormwater.

Open Spaces provide civic public spaces that serve the users of the site as well as the residents of surrounding neighborhoods. These spaces provide the region's population with access and connection to the development and the riverfront.

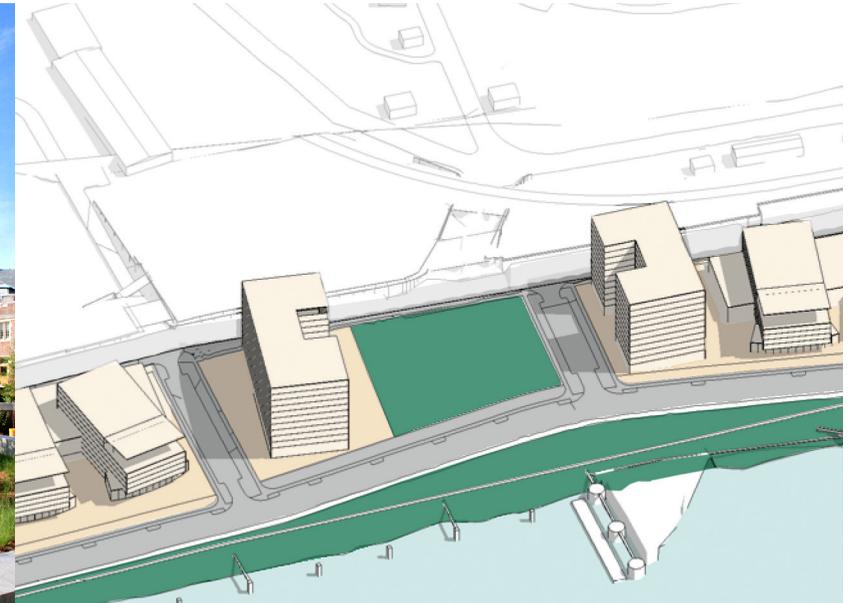
Building Development Site guidelines are defined to create a walkable urban environment reinforced by location-specific buildings. Buildings will respond to and be designed for their individual site locations in order to contribute to the civic goals for Rights-of-Way and Open Spaces.



Rights-of-Way provide access and promotes social interaction



Open Spaces define a network of outdoor civic space and ecological infrastructure



Building Development Parcels are location-specific and contribute to the public realm

Existing Conditions

Site Location

The Almono Site is comprised of multiple contiguous and non-contiguous parcels totalling approximately 178 acres. The SP District designation is being pursued for the site area outlined in the diagram below.

The site is located in the Hazelwood neighborhood of Pittsburgh. It is bound to the North by a surface parking lot adjacent to the Hot Metal Bridge. To its east, the site is bound by the former Second Avenue right-of-way and the CSX railroad mainline. To the south and southeast, the site meets the adjacent Hazelwood neighborhood.

Along the western edge, the site is adjacent to the river before stepping back from the river's edge behind the railroad-owned parcel at the river's edge.

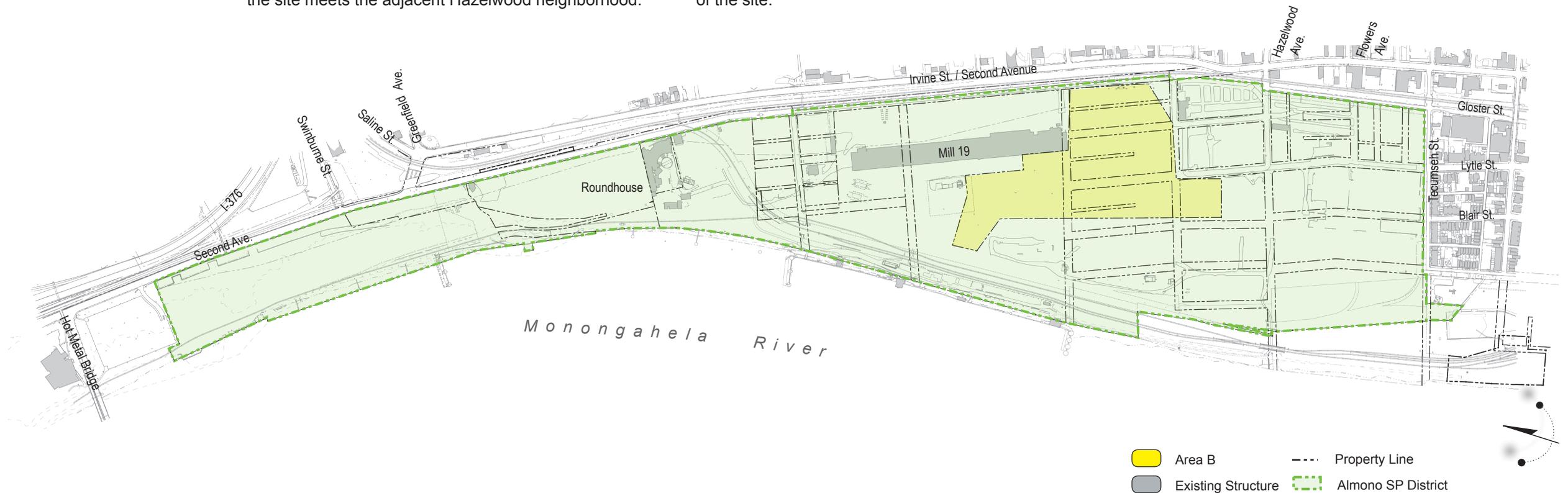
Pennsylvania Brownfield Redevelopment

The Almono site is a "brownfield" project undergoing redevelopment and remediation pursuant to Pennsylvania's Land Recycling and Environmental Remediation Standards Act, more commonly known as "Act 2." Certain remedial measures, including institutional/engineering controls, are required as a prerequisite to reuse of the site.

The site will be capped in accordance with ACT 2 standards. Additional provisions may be required for construction located within Area B.

Existing buildings

The site contains two primary existing structures, the Mill 19 building and the former railroad roundhouse.



SP DISTRICT GOALS

Common Goals

This PLDP document has been created with insight and feedback from the Department of City Planning and the Department of Public Works as they continue their respective work and development of their infrastructure and development systems.

Common goals were established at the outset of the Specially Planned (SP) District process. This included aligning the Almono Vision with the components defined for “PlanPGH,” the City of Pittsburgh’s first comprehensive plan, which is currently in process. These twelve subject areas of PlanPGH have been organized into Rothschild Doyno Collaborative’s “ESP Framework” that differentiates Economic, Social, and Physical considerations for the development.

While some of the PlanPGH subject areas are underway, others have not yet begun. The goal of using this in-progress organization overlay is to advance this site’s development while attending to the larger systems with which this site will connect and advance.

Development pursued in an open and articulate manner will increase the depth of detail, information, and knowledge that is deployed on this site. Proposed developments will present how their designs attend to the parameters established in this PLDP document.



Rothschild Doyno Collaborative’s ESP Framework, along with Plan PGH Comprehensive Planning components, provided the organization of goals site systems detailed in Section 1.3.



Economic Goals

- ▶ **Attract developers** to invest and pursue projects
- ▶ Provide site amenities supported by properties that **generate tax revenues**
- ▶ **Do not overly subsidize** to achieve success
- ▶ Incorporate for **profit and non-profit** entities into the planning and use of the site
- ▶ Participate in changes in the **energy economy**
- ▶ Generate **reinvestment** in the area surrounding the site

WORK



Spur Economic Activity and Attract Development

Economic Development

- ▶ Allow for flexibility in phasing and compatibility of adjacent uses to ensure successful development in each phase and district.
- ▶ Ensure that interim developed and undeveloped sites are compatible and not detrimental to the success of early development phases.
- ▶ Reference and leverage changes in market demand while advancing the Vision and PLDP for the site.
- ▶ Integrate funding to develop public open spaces at appropriate times relative to development of adjacent private land.

LAND USE



Activate the Site with Compatible and Complementary Uses

Zoning and **PLANPGH** Policy Integration

- ▶ Target a mix of uses that will optimize the economic, social, and physical value of the site.
- ▶ Maintain a balance of density, use, and placemaking throughout each phase and with each development project.
- ▶ Apply urban design principles and best practices to establish density thresholds and diversity of activity needed to ensure long-term success.

DESIGN



Create Great Pittsburgh Places

Urban Design

- ▶ Establish clear design guidelines and development standards that can readily be applied to individual development.
- ▶ Create meaningful places that are particular to their location that elevate the human experience and encourage interaction.
- ▶ Set standards for setbacks, massing, heights, entrances, windows, street front transparencies, view corridors, and materials to establish high quality of human spaces.
- ▶ Take advantage of the unique riverfront location with appropriate activities, urban form and public spaces.
- ▶ Encourage aspirational and creative design and development that advances the broader goals for the site.

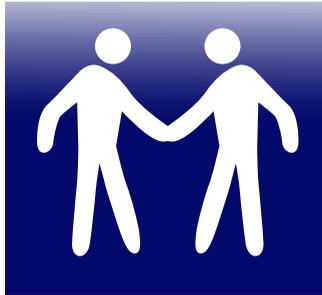
POWER



Explore Energy Systems of the Future

Energy and Efficiency

- ▶ Investigate alternate energy sources and district systems based on feasibility, investors, and market. Consider development incentives related to exchange, reduction, and efficiencies in energy use practices.
- ▶ Support measurement of building and site energy performance.
- ▶ Explore opportunities for on-site green energy production systems.



Social Goals

- ▶ Be **welcomed by** and collaborate with the existing communities
- ▶ **Build synergies** by serving a wide range of interests and needs
- ▶ Attract a **diversity of groups** to participate in change making
- ▶ Provide **access to the river** for all people
- ▶ **Attract new people** to the site and to the surrounding neighborhoods

LEARN



A Healthy, Educated Workforce is the Foundation of a Vibrant Urban Community

Educational Facilities

- ▶ Integrate site systems, including transportation and building designs that fosters curiosity and engagement.
- ▶ Integrate workforce development, youth development, and other organizations and efforts that help people to learn and grow.
- ▶ Attract Pittsburgh's various public and private schools, colleges, and universities to participate in this site's development.

LIVE



Advance Pittsburgh as the Most Livable City for All People

Housing

- ▶ Provide housing types that complement the housing stock in the adjacent neighborhoods in order to encourage restoration of the surrounding community.
- ▶ Understand market, demographics, and needs in order to develop an appropriate mix and diversity of size, affordability, amenities, and other qualities.
- ▶ Provide healthy and connected indoor and outdoor spaces for residences in order to support well-occupied public place.

ART



Engage and Attract the Community through Public Art

Public Art

- ▶ Integrate funding for public art in community open space.
- ▶ Foster performance art and community art projects that facilitate activity on site.
- ▶ Encourage integration of arts in private land development.

PRESERVE



Keep Memories of the Site Alive

Cultural Heritage and Historic Preservation

- ▶ Seek new adaptive uses for the Roundhouse, Pump House and Mill 19.
- ▶ Retain river infrastructure when feasible and consider reuses for "ice-breaker" and "dolphin" elements in the development of the river edge.



Access and Universal Design

- ▶ Integrate relevant performance and reference standards for accessibility, and utilize new and emerging technologies when feasible.
- ▶ Be appropriate to parameters for both public and private property.

MOVE



Increase Connection Over Time using Multiple Modes of Transportation

Transportation

- ▶ Propose a transportation network to accommodate multiple modes of transportation as appropriate to the stage of development.
- ▶ Incorporate pedestrian, bike, car, and truck networks into surrounding grid and plan for links to current street-based transit and allow for future fixed-transit systems.
- ▶ Review on-site and adjacent network capacity periodically based on 5-year window of time and project development thresholds. Create a master plan where transportation potential is proportionate to development density.
- ▶ Outline intent for connecting with larger transportation systems beyond the boundaries of the project including transit, rail, and river systems.
- ▶ Propose a right of way system that aligns use of intersections with appropriate modes of transportation.
- ▶ Balance vehicular transportation with bicycle and pedestrian transportation and advance urban design and placemaking goals.

SERVICES



Address Pittsburgh's Aging Infrastructure with Visionary Infrastructure

Infrastructure Services

- ▶ Plan Rights-of-Way and Open Spaces to interact in order to create the human-centered places that also address stormwater with both structural and nonstructural (natural) systems.
- ▶ Design stormwater systems to meet local, state, and federal regulations through use of Best Management Practices (BMPs) recognizing the constraints of a brownfield development site.
- ▶ Develop creative solutions on a site, district, and parcel scale.
- ▶ Recognize the connection to larger public water and sewer systems and coordinate with authorities and agencies where possible for the improvement of such systems by the agencies and authorities as practicable.

Physical Goals

- ▶ Learn from visionary precedents
- ▶ Plan transportation as both local and regional, for the short and long-term
- ▶ Use best practices in **sustainable site and building design**
- ▶ Advance **alternative energy systems** over time
- ▶ Propose **imaginative reuse of existing buildings**
- ▶ Provide a **mixture of uses** appropriate to distinct locations
- ▶ Create a **unified vision**



OPENSOURCE



Pittsburgh's Riverfronts, Parks, and Green Hillside are Signals of Natural Restoration

Open Space, Parks, and Recreation

- ▶ Allow for system changes and technology that develops, integrates, and improves systems over time.
- ▶ Connect with public parks and hillside networks.

FACILITIES



Deliver Services that Improve the Quality of Life in Pittsburgh

City-owned Buildings

- ▶ Create healthy landscapes appropriate to the microclimate, moisture, and soil condition.
- ▶ Foster development in order to increase site activity. Higher density transportation systems such as rail or fixed-transit are beyond the purview of this document. However, the urban patterns allow for future transit-oriented development nodes.
- ▶ Incorporate new building and site development regulations into the zoning code text. Be flexible and respond to a range of uses and locations.

HISTORY OF THE ALMONO SITE

A Neighborhood on the River's Edge

Hazelwood's name derives from the Hazelnut trees that once covered the shores of this bend of the Monongahela River. Following the 1758 Stanwix Treaty with local Native Americans, the area was first settled mainly by those of Scottish descent, leading to the area's other name, Scotch Bottom.

The rise of Pittsburgh industry in the 19th century transformed Hazelwood from a pastoral landscape of wealthy estates to a bustling working-class neighborhood with railroads and a steel mill. Pressure from Hazelwood residents led the initial lines of the Pittsburgh and Connellsville Railroad to be located inland to preserve the Monongahela River's aesthetic value. This railroad separated the neighborhood, with one area denoted as "below the tracks."

The development of the Hazelwood Coke Works (part of Jones and Laughlin Steel Works) and other industries coincided with Hazelwood's incorporation into the city of Pittsburgh in 1869. By the 1970s, Hazelwood was home to a diverse population of workers of many ethnicities. The Hazelwood Coke Works, later purchased by LTV Steel, remained the last operating steel mill in the City of Pittsburgh until its closure in 1998. The collapse of the steel industry has significantly impacted Hazelwood's population, as residents move elsewhere seeking accessible and sustainable employment.

The population of the City of Pittsburgh and Hazelwood peaked in the 1950s, and since that time, Hazelwood's population has decreased by more than 60%, while the city's has dropped by roughly 45%. As Pittsburgh is poised to realize population growth, Hazelwood is prepared to lead the way with its riverfront, proximity to economic centers, and diverse population.

Population and Density

City of Pittsburgh		Sector 9
	POPULATION:	
671,657	Pop. 1940	29,597
676,805	Pop. 1950	31,898
615,242	Pop. 1960	29,876
523,417	Pop. 1970	23,694
438,138	Pop. 1980	18,448
369,879	Pop. 1990	15,734
333,527	Pop. 2000	13,971
305,704	Pop. 2010	12,327
	POPULATION CHANGE:	
-14.9%	Pop. Change, 60-70	-20.7%
-16.3%	Pop. Change, 70-80	-22.1%
-15.6%	Pop. Change, 80-90	-14.7%
-9.8%	Pop. Change, 90-00	-11.2%
-8.3%	Pop. Change, 00-10	-11.8%
	POPULATION DENSITY:	
55.4	Land Area (sq. mi)	2.81
35,466.2	Land Area (acres)	1,799.7
6,019	Persons / sq. mi (2000)	4,968
5,517	Persons / sq. mi (2010)	4,384
9.4	Persons / acre (2000)	7.8
8.6	Persons / acre (2010)	6.8

Courtesy of PittsburghSNAP www.pghsnap.com



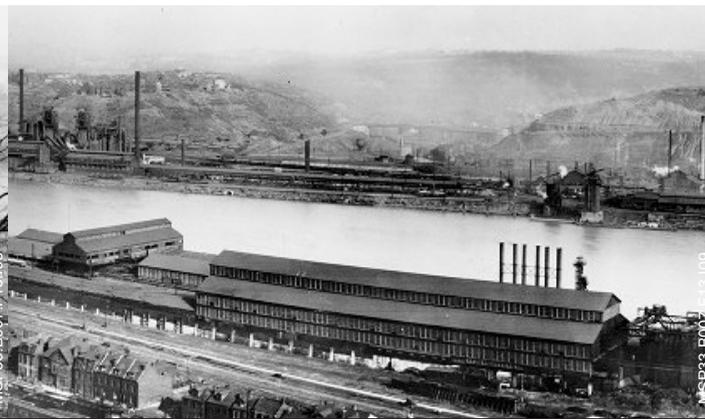
A: Hot Metal Bridge (1887)



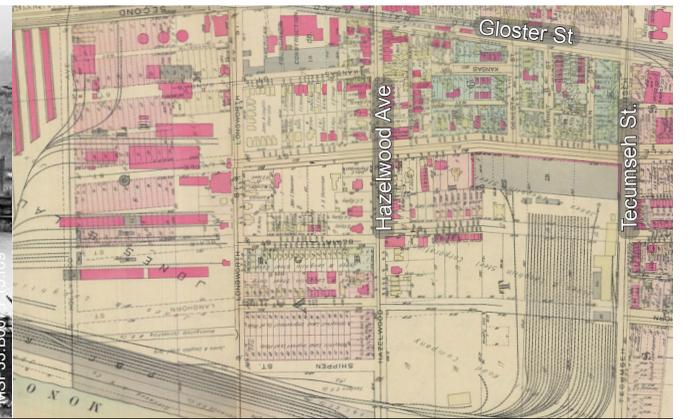
B: Structural Steel Shop (1889)



C: Overview of J&L Steel Works, with Hot Metal Bridge in center (1921)

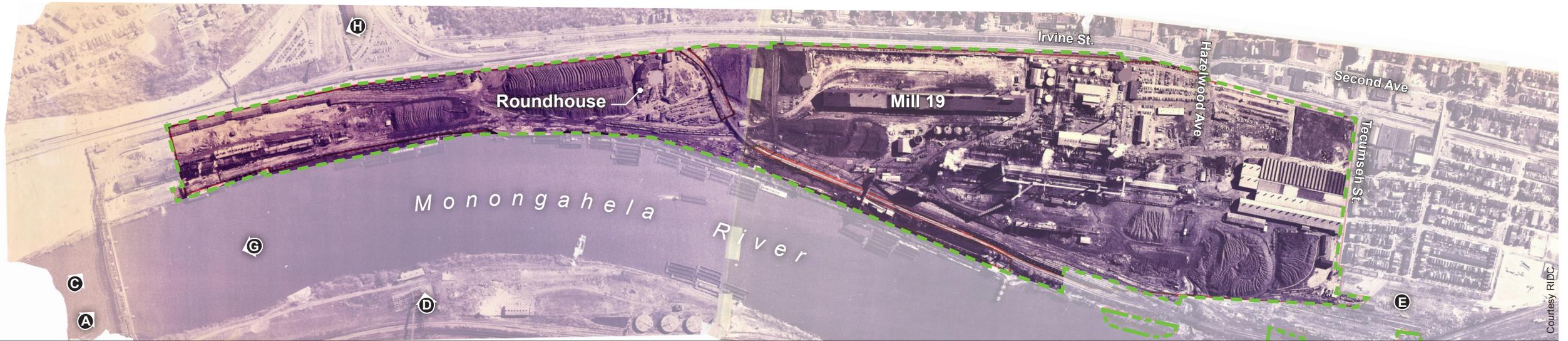


D: View south over Jones & Laughlin Steel Works (1921)



E: Hazelwood Avenue & Second Avenue vicinity (1923)

HISTORY OF THE ALMONO SITE



Aerial View Photo of Almono site and surrounding area (undated)



F: Barge Loading Building located downriver (1950s)



G: River Car Ferry passing under the Hot Metal Bridge (1927)



H: J & L Steel Corporation with downtown Pittsburgh visible in the distance (1949-1955)

REGIONAL & NEIGHBORHOOD CONTEXT

The Re-Emerging City...

Pittsburgh has made a major transformation from an energy-driven industrial city into a diversified 21st century hub for manufacturing, technology, education, health care, and the arts. But Pittsburgh is not done transforming. In the next decades we will see even more changes.

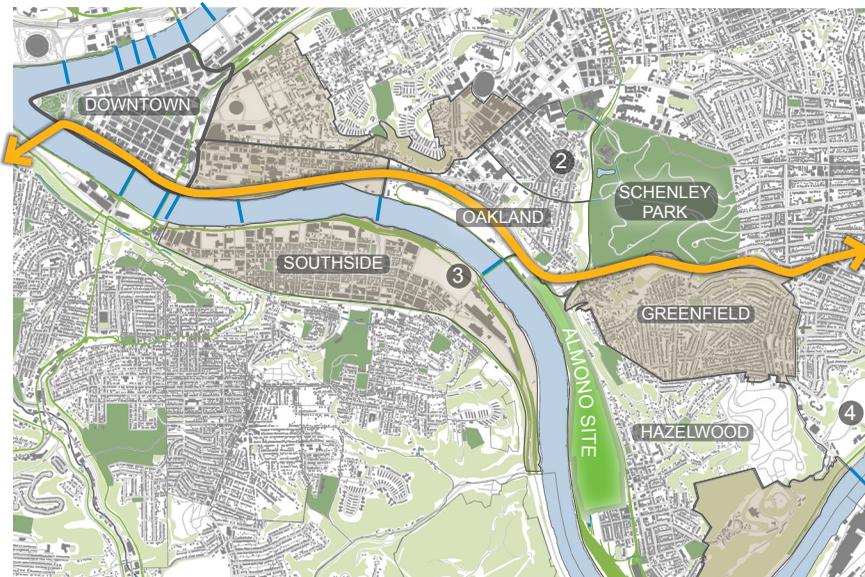
Pittsburgh has been reclaiming riverfront and brownfield sites, and returning land to productive, higher and better uses. Over the last decade, neighborhood populations have declined and shifted; nature has reclaimed hillsides. These areas will change again as people return to urban living and Pittsburgh begins to grow in

population, public riverfronts, educational attainment, and service and production job markets. This supports the type of change that can improve the quality of life for all residents. This site is poised for development as an urban riverfront community that enhances Pittsburgh's economic, social, and physical conditions.

In the neighborhoods that surround the site, there is strong support for change that provides job opportunities and development that can be a catalyst for investment. The vision for this site focuses on connectivity, building forms that respect and reflect the surrounding community, and provisions for streets

and public places that connect people to one another. The Almono site's development will bring attention and opportunity to areas that have experienced substantial disinvestment.

The Almono site is in close proximity to downtown Pittsburgh and Oakland, two of the largest employment centers in Pennsylvania. With the improvement of transportation networks, trails, and parking connections, this site will capitalize on this adjacency. The site will also build and expand upon the successful neighboring developments of the well-established Pittsburgh Technology Center and the South Side Works.



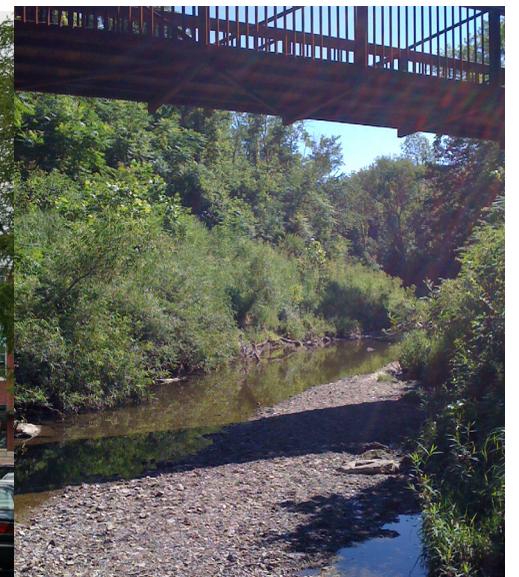
City Map showing Almono site its proximity to surrounding neighborhoods



2: Central Oakland Skyline



3: South Side Works Mixed Use



4: Nine Mile Run Restoration of Natural Systems



Aerial Image of the Almono site, with Oakland and Downtown Pittsburgh beyond

SITE CONTEXT

A Connected and Diverse Location

The Almono site, the 178-acre former location for LTV Steel, is situated along the Monongahela River in Hazelwood, adjacent to the neighborhoods of Oakland, Greenfield, the South Side, and Glen Hazel. Hazelwood is separated from adjacent neighborhoods by wooded hillsides, the Monongahela River, and elevation differences of two- to three-hundred feet.

Several traffic routes lead from the Almono site to neighborhoods that are thriving communities and major economic hubs. Located nearby is Interstate-376

between the site and Oakland and Downtown. To the east, Second Avenue, PA Route 885, links the site to Oakland, Downtown, and the Mon Valley to the south. Second Avenue also connects the Almono site to the Pittsburgh Technology Center, a development that converted an industrial site into research facility. Additionally, the Hot Metal Bridge runs over the Monongahela to the SouthSide Works, a successful mixed-use urban, residential, retail, and commercial development integrated into the South Side neighborhood. Despite this proximity, Hazelwood has not experienced the improvements and reinvestment seen in the surrounding



communities. The surrounding communities are accessible via privately-owned vehicular transportation, limited public transit, and very limited sidewalk networks, which has increased the separation of Hazelwood from the re-emerging Pittsburgh. The threat of a now-abandoned major highway planned to go through the site and community also discouraged investment.

Surrounding the Almono site, the neighborhood of Hazelwood has varied uses, ranging from industrial to residential. The proposed development of the Almono site connects with and responds to the different contexts, respecting existing buildings' scale and vernacular. Additionally, many industrial buildings, objects, and infrastructure remain on site. This creates an opportunity for creative adaptive reuse that will further enhance the site's character and allow for the history and future to be more clearly connected.



A: Volunteers landscaping in Hazelwood



B: View north up Elizabeth Street, Below the Tracks



C: View north of Monongahela River, Almono Site on right



D: "S" Curve railroad ROW easement through Almono Site



E: Hot Metal Bridge, Pittsburgh Technology Center beyond



F: Irvine St. / Saline St. / Greenfield Ave / Second Ave Intersection



G: Junction Hollow

PROJECT BACKGROUND

Reclaiming a Brownfield Site in Pittsburgh

In 2002, the Almono Limited Partnership purchased the 178-acre LTV Steel Hazelwood site.

Convinced this remarkable riverfront plateau offered a rare opportunity to set a new standard for urban riverfront property development, Almono LP undertook several years of studying potential development options.

The team envisioned a master-planned development that would maximize local and regional impact, as well as employ development and economic “Best Practices” from across the globe. Almono LP’s focus on the long-term sustainability of the project is paramount to the planning effort.

Throughout the planning process, Almono LP maintained a long-term vision of their desired outcomes. This viewpoint helped the project retain its focus during periods of uncertainty, such as before the expiration of the Record of Decision for the Mon-Fayette Expressway, which would have severely impacted the project site.

As surrounding markets and other urban brownfields were developed and the planning proceeded, Almono LP continued efforts to stabilize the site and accept more than 800,000 cubic yards of fill to prepare for the future development.

In February 2010, Almono LP engaged Rothschild Doyno Collaborative to develop a vision for site development that could move from vision to action and begin the transformation of the site.

The ownership’s patient approach in both the physical and financial realm of development demonstrates their commitment to creating a connected development that optimizes this last large riverfront brownfield in Pittsburgh while invigorating the surrounding area. This patience has allowed for greater collaboration among stakeholders to envision meaningful places for all residents and visitors to work, live, and play.



Roundhouse on Almono Site



Pumphouse on the Monongahela River



Mill 19 on Almono Site



Existing Rail Line through Almono site

THE VISIONING

Developing a Shared and Supported Vision

During the Visioning process, Almono LP established their economic, social, and physical goals for the development. These goals served as the foundation for the process of moving forward.

The Almono Vision re-imagined the site as a restored economic base, generating reinvestment and attracting private and non-profit entities to the development and the area surrounding it. A mixture of uses seeks to attract a range of businesses that can thrive in conjunction with the community and area workforce. This revitalization will serve a wide range of interests and needs, attracting diverse groups who will help to create a welcoming community. The resulting mixed-use development seeks to continually learn from precedents; progress alternative energy systems; and advance best practices in sustainable site and building design.

The development of the scale and complexity of the Almono site will require many hands. The vision process sought out a wide array of community and stakeholder goals and interests. Rothschild Doyno Collaborative designed an engagement framework to capture a broad range of feedback from four different groups whose shared understanding would make the development attractive and welcoming to investors and future neighbors. Participants were sought to reflect a balance of community perspectives.

- ▶ **Communities of Proximity** are people living next to the site or in adjacent or connected neighborhoods.
- ▶ **Communities of Interest** are people or organizations working to advance a particular mission.
- ▶ **Communities of Leadership** are elected officials and civil servants that make policy decisions, administer regulations, and allocate resources.

- ▶ **Communities of Action** promote service missions and encourage future leaders in initiatives that benefit the underserved.

Information was shared as it was developed through roundtables and community meetings. Feedback and insights were continually integrated into the design intentions.

The Design Sketchbook process was used to share observations about conditions and help stakeholders to envision and exchange ideas. The concerted effort on behalf of the consultant team built a support network and desire to see the vision move forward.

160+ participants

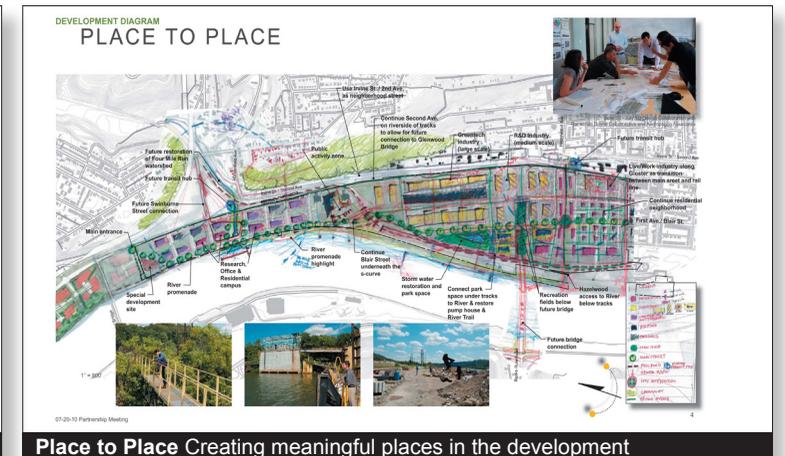
Attendance at 6 community meetings since March 2010



Community Meeting Hazelwood Initiative



Advisory Communities Identifying participants in visioning process

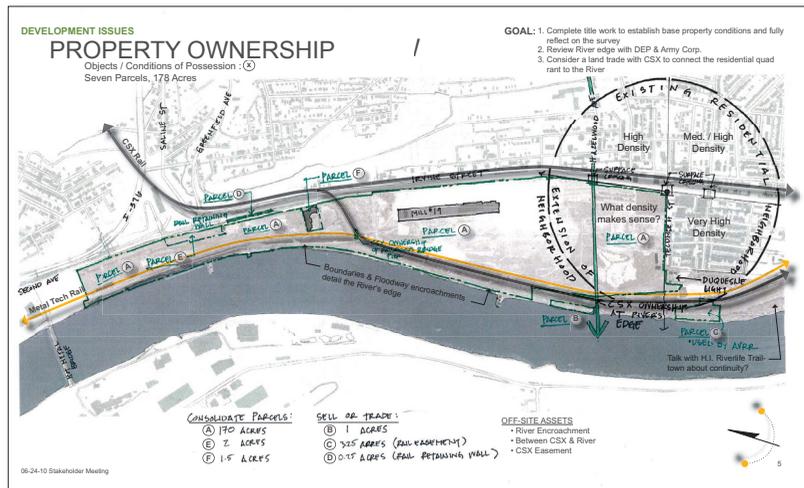


Place to Place Creating meaningful places in the development

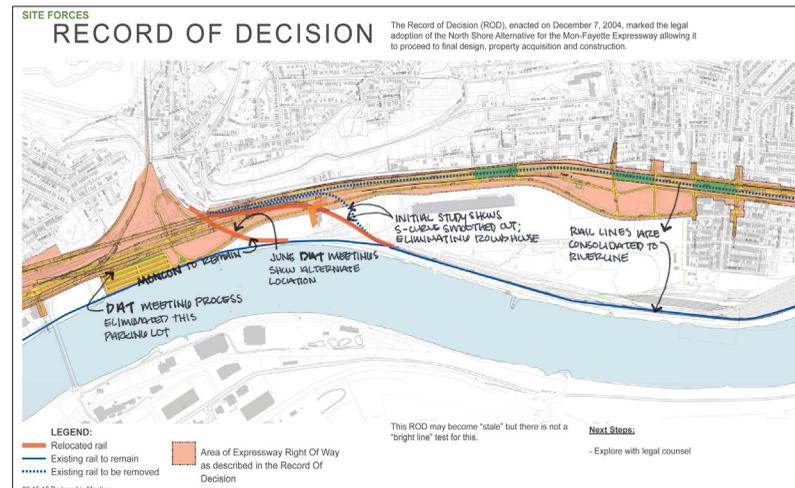
SITE FORCES

Developing an Understanding of the Site

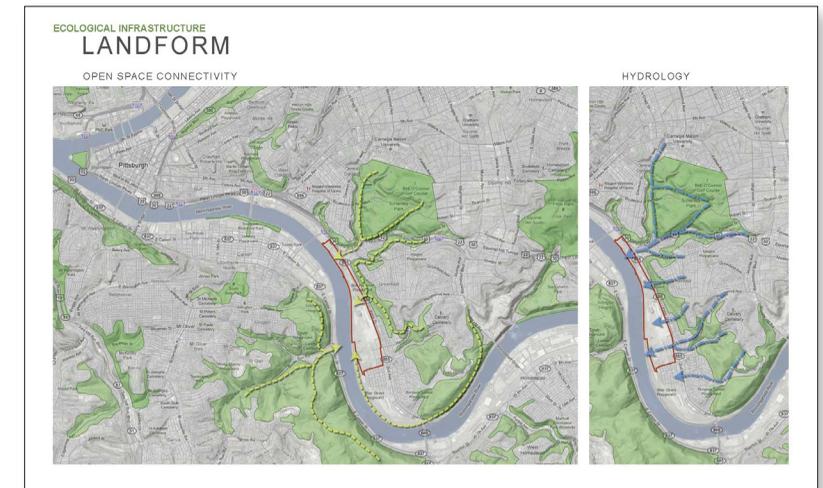
To implement a plan that could be advanced in many ways or speeds required vision that “fits” into the real conditions in and around the site. These conditions were documented into Design Sketchbook pages to share information and establish necessary parameters to which the design responds and accommodates.



Real Property Boundaries The vision identified that the site was made up of numerous parcels. The vision and SP District boundary encompass all parcels owned by Almono LP (both contiguous and detached). Property ownership does not extend to the river at the southern end of the site adjacent to the neighborhood.



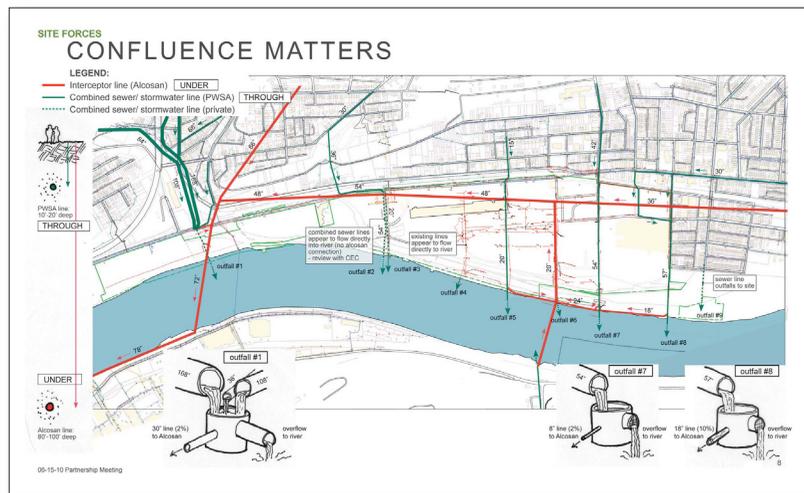
The Mon Fayette Expressway Record of Decision exceeded its limitations as of in December 2011. This new condition allows investors to move forward confident in the future conditions of the site.



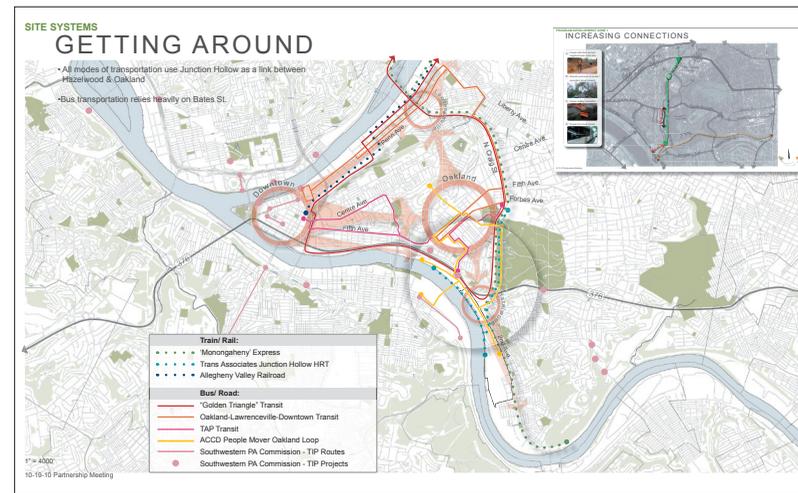
Our Green City Pittsburgh’s dramatic hillsides are vital natural infrastructure. The natural hydrology of the site can have positive effects on the wildlife and environment, create attraction for visitors, and reduce sediment runoff into the river.

Moving People, Products, and Power...

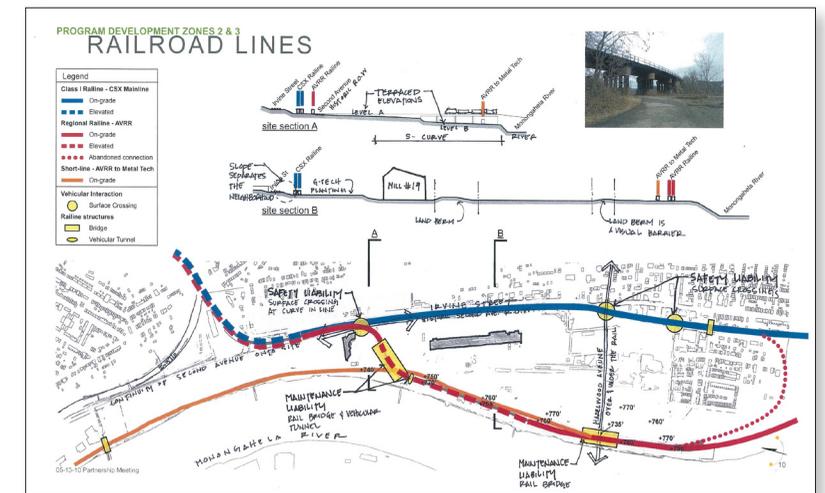
The history and location of the Almono property are both assets and challenges to its redevelopment. As a former industrial site, many roads and streets converge upon the property. There are several Rights-of-Way that run through the site. Municipal water and sewer lines, some very old, run underneath the site. Each of these technical networks have been examined and formed constraints considered throughout the planning and PLDP process.



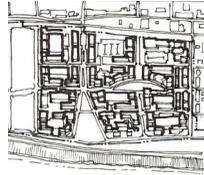
Existing Infrastructure This site plays a role in addressing regional combined sewer overflow conditions. Regional sewer collectors run deep under the site while area collector pipes and combined sewer regional overflows demand a collaborative solution that is presently being discussed at many levels of community and government.



Regional Transportation Considerations Connecting the site to the regional car, trail, and transit networks is important to the site's development. Many needs will evolve and emerge as a range of possible outcomes are explored and allowed for. A sequence of changes and periodic revisiting of transportation issues using PennDOT's 5-year development window will allow for continued improvement in the future.



Railroad Rights-of-Way This site contains multiple railroad lines, with multiple owners as well as key grading and elevation changes. The design accommodates the railroad and navigates both the at grade and elevated crossing considerations.



SECTION 1.2

CONCEPT PLAN

Almono Vision	1.2 - 01
Development Districts	1.2 - 02
Types of Land	1.2 - 03

ALMONO VISION

The Next 127 Year Plan....

As the steel industry fed the regional economy and fostered the growth of Pittsburgh for more than a century, the current vision for this site will attract a new wave of economic investment, create jobs, connect communities, and advance Pittsburgh's unique blend of nature, community, and sustainable urban quality of life for the next century to come.

The site is connected by a signature boulevard and trail that weaves along the river's edge, under the working railroad, past the site's new and repurposed industrial buildings, through new neighborhoods and parklets, and into Hazelwood's existing neighborhood street grid. The vision connects Hazelwood to the shores of the

Monongahela River while working within the realities of property lines, sewer conditions, and railroads so that development can readily move forward in various ways. Opportunity is motivated by market demand, continued innovation, job growth, and entrepreneurship. Along the mile-and-a-half long signature boulevard, a mixture of proposed uses support these conditions and offer a wide range of development and "place-making" opportunities in four "districts."

Public open spaces throughout the districts include plazas, river park spaces, passive park areas, and active open spaces, including a sports field. These unique 'events' will attract people to the site and

connect to dedicated trails, walks, and road networks. The plan anticipates and allows for future transit and area road network changes. Over time, the distinct collection of open spaces and trails will link the green hillsides and community of Hazelwood to the Monongahela River.

Together, the signature road, the four districts, and the road and open space networks will create a profound riverfront address for the communities of the Hazelwood Peninsula. The vision will invite new development and economic opportunity while providing links between the river, the hills, the neighborhoods, and communities that surround and flow down through the site.



The blue diagram line defines a signature boulevard that links four distinct districts across the site. This boulevard provides a regional connection to the river while seamlessly connecting the new development to the adjacent existing neighborhood

DEVELOPMENT DISTRICTS

Four Interconnected Districts

The 178-acre site will function as distinct, yet complementary and interconnected districts, each with mixtures of different allowed uses and unique and meaningful places.

At the north end of the site, taller mixed-use office and residential buildings at the narrow four-mile run end of the site will link to the “eds and meds,” education and medical industries, of Oakland and reflect the uses of the Downtown Business Center, and the mixed-use

qualities of the South Side while also reflecting the neighborhood qualities of adjacent Glen Hazel, Greenfield, and Squirrel Hill. At the south end of the site a fully connected neighborhood street grid will align with the existing streets of Hazelwood. In the middle of the site, two districts will accommodate clean industrial uses, offices, a re-purposed railroad roundhouse and other remaining industrial buildings as site access actually improves and more development becomes feasible.



Riverview provides high-performance buildings that focus their form and function outward to the river to optimize views, occupancy and activity on the riverfront. Site experiences connect hillsides and Schenley Park to the Monongahela River at Four-Mile Run. Riverside Park begins a remarkable 1.5 mile stretch of new, active public riverfront for Pittsburgh.



Smart Site Central Green is anchored by the restoration of the historic roundhouse. The surrounding landscape becomes a destination for studying and promoting the exploration of environmental, water, and energy production, leaving open space in which land-based energy or other research and development efforts can be accommodated.



Eco-Tech Park is an opportunity to advance and re-define the relationship between applied knowledge, regional economic benefit, environmental reconciliation, energy use & industrial uses.



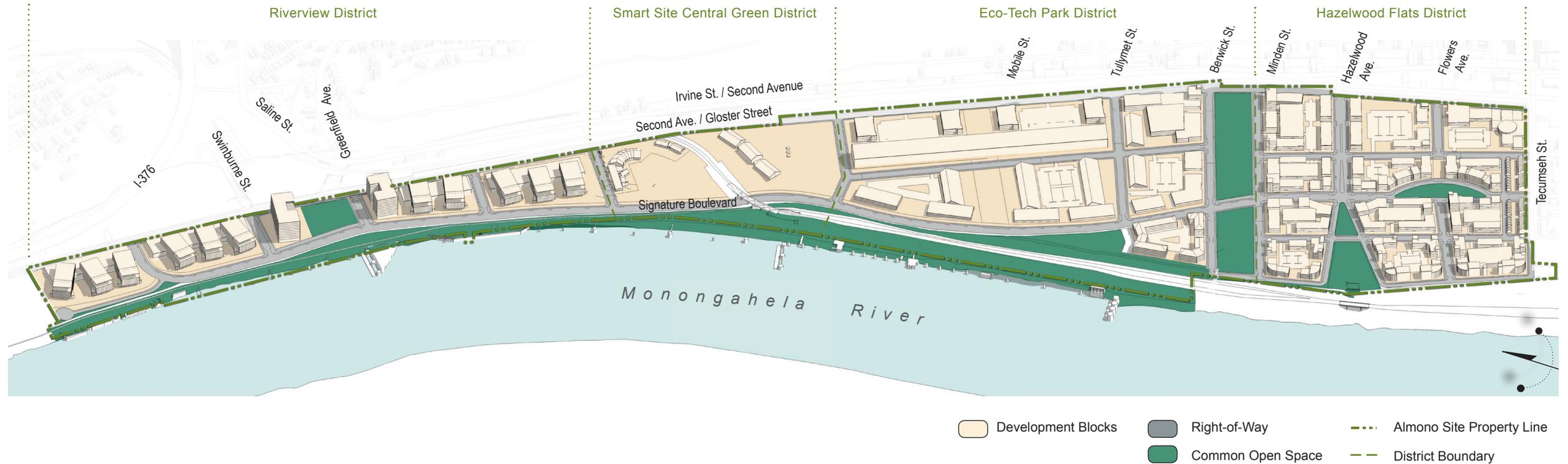
Hazelwood Flats establishes a fully connected “fourth quadrant” to the Hazelwood neighborhood. This encourages reinvestment to occur both on and off-site concurrently.

TYPES OF LAND

Connected, Incremental Development

The Almono development identifies three primary land types: **Rights-of-Way, Open Space, and Building Development Sites.**

Within this larger framework, development projects will include building, connecting infrastructure, and open spaces that reflect the broader vision. This document defines a hierarchy of relationships between the building, the parcel, the blocks, the streets, the districts, and to the site as a whole so that each individual development can be designed to add to and benefit from each scale of consideration.



RIGHTS-OF-WAY

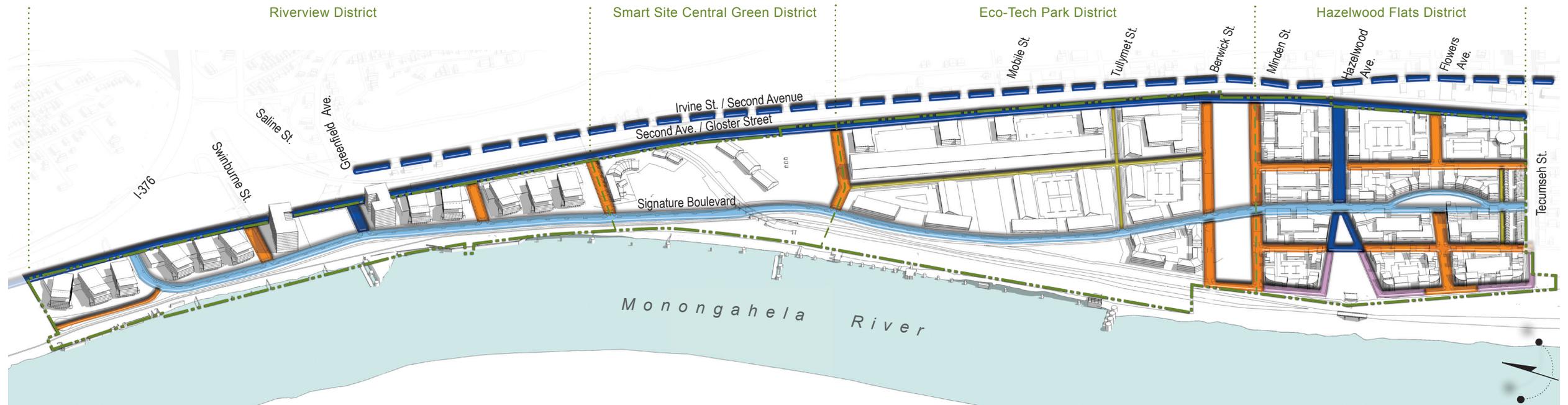
Rights-of-Way

Rights-of-way accommodate the flow of motorists, pedestrians, and bicyclists through a connected network of streets that extend throughout the site.

This connection continues beyond the site boundaries to neighboring communities and the region. Rights-of-way play a critical role in defining the place-making characteristics of the development and the interaction between public space and buildings, promoting social interaction and street level activity.

The vision for the site establishes a hierarchy of rights-of-way that support the site's place-making vision. This includes multiple modes of movement, using "Complete Streets" from the signature boulevard that connects the site to smaller neighborhood-scaled streets that define development blocks.

Refer to Section 2.1: Rights-of-Way for additional detailed information.



OPEN SPACE

Common Open Space Minimums and Maximums

The interconnected rights-of-way network is neighbored by open spaces that establish the character and provide destinations in each Almono district.

Two types of open space are defined: Common Open Space and Parcel Open Space. **Common Open Space** includes passive and active parks, plazas, and trails that contribute towards the provisions of Urban Open Space defined in the SP District zoning code.

Parcel Open Space includes the portion of a parcel not occupied by buildings or parking / loading and intended for use as private open space. A minimum to maximum range of Common Open Space is provided to allow for water-oriented use within the open space.

Parameters for Open Space are further defined in Section 2.2 and Permitted Land Uses in Section 2.3

178 acres

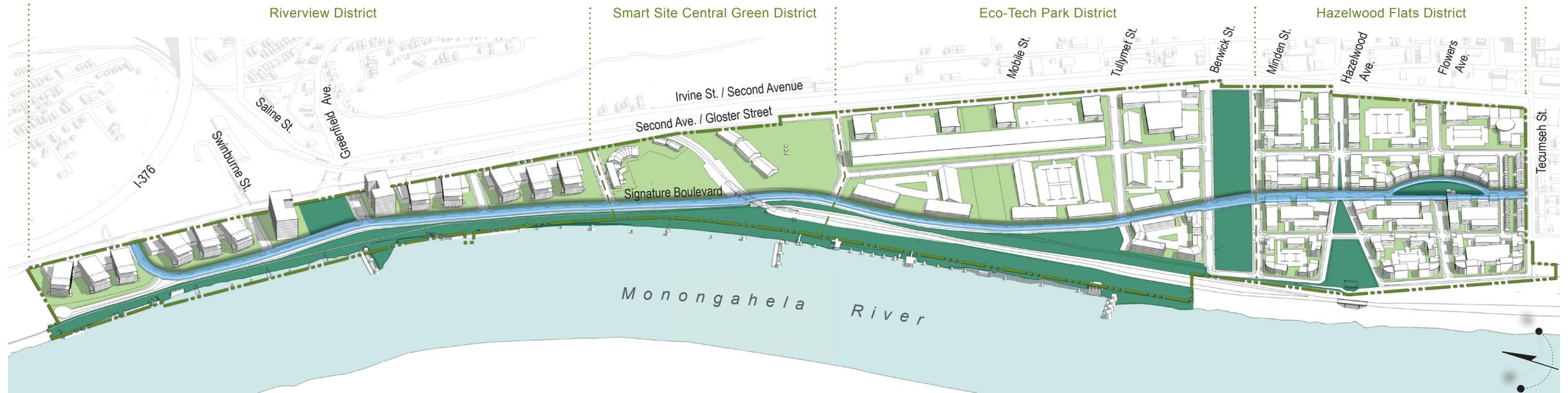
Almono site area

11% to 15% (19.28 -26.8 acres)

Almono site area dedicated toward Common Open Space

10% (17.8 acres)

Urban Open Space required per Specially Planned District



Almono's Common Open Spaces are connected throughout the site by the Signature Boulevard. This "complete street" provides a regional connection to the river while seamlessly connecting the new development to the adjacent existing neighborhood.

- Signature Boulevard
- Common Open Space
- Parcel Open Space
- Almono Site Property Line
- District Boundary

BUILDING DEVELOPMENT BLOCKS

Development Parcels

The land not designated as rights-of-way and open space define blocks of development parcels. This land becomes the space for private parcel-based open space, site, and building development. A variety of distinct block sizes anticipate commercial, industrial, mixed-use, and residential activity.

Development blocks may be further divided into individual smaller development parcels, depending on development project make-up.

Parameters for block, parcel, and building development are further defined in Section 2.3: Building Development Guidelines.

18.4 acres

Riverview District
development block area

13.5 acres

Smart Site Central Green District
development block area

34 acres

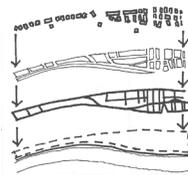
Eco-Tech Park District
development block area

33 acres

Hazelwood Flats District
development block area



- # Block Designation
- Development Blocks
- Almono Site Property Line
- District Boundary



SECTION 1.3

SITE SYSTEMS

ESP Systems Guidelines	1.3 - 02	Housing	1.3 - 15
Economic Vision	1.3 - 03	Public Art	1.3 - 17
Workforce and Jobs	1.3 - 05	Cultural Heritage	1.3 - 19
Land Use	1.3 - 07	Physical Vision	1.3 - 22
Urban Design	1.3 - 09	Open Space	1.3 - 23
Social Vision	1.3 - 11	Transportation	1.3 - 29
Education and Workforce Development	1.3 - 13	Utility Infrastructure	1.3 - 43

SITE SYSTEMS

The intent of the Site Systems are to articulate the vision for the site-wide systems across the **Rights-of-Ways, Open Space, and Building Development Sites**.

This document is intended to describe the site systems at three scales. The sitewide scale is described in this section. Information organized by land-type at the district scale can be found in Section 2. More detailed information about individual components can be found in Section 3.

ESP Framework / PlanPGH

The systems align, where possible, with the City of Pittsburgh's PlanPGH comprehensive planning categories and the SP District Goals.

They have been organized into three major groups to identify the primary Economic, Social, or Physical nature of each system. Additional systems have been identified and are also included.

Economic

Social

Physical

PlanPGH Component



WORK Economic Development
Spur Economic Activity and Attract Development



LAND USE Zoning and **PLANPGH** Policy Integration
Activate the Site with Compatible and Complementary Uses



DESIGN Urban Design
Create Great Pittsburgh Places



POWER Energy and Efficiency
Explore Energy Systems of the Future



LEARN Educational Facilities
A Healthy, Educated Workforce is the Foundation of a Vibrant Urban Community



LIVE Housing
Advance Pittsburgh as the Most Livable City for All People



ART Public Art
Engage and Attract the Community through Public Art



PRESERVE Cultural Heritage and Historic Preservation
Keep Memories of the Site Alive



OPENSOURCE Open Space, Parks, and Recreation
Pittsburgh's Riverfronts, Parks, and Green Hillides are Signals of Natural Restoration



FACILITIES City-owned Buildings
Deliver Services that Improve the Quality of Life in Pittsburgh



MOVE Transportation
Increase Connection Over Time using Multiple Modes of Transportation



SERVICES Infrastructure Services
Address Pittsburgh's Aging Infrastructure with Visionary Infrastructure

ECONOMIC VISION

Re-weaving the Brownfield

Over the past twenty years, Pittsburgh has become a leader in redeveloping former industrial sites into active uses that benefit the community. This has been accomplished by connecting people to the region and its landscape by focusing on riverfront conditions, connecting people to one another through a collaborative development process, and connecting people to a vital economic market by the infusion of jobs and investment in their communities.

Almono exemplifies the successes of a cooperative development process while also focusing on advancing

the economic, social, and physical conditions of the development as well as its surrounding neighborhoods. The economic vision for Almono features pad-ready building sites that will provide numerous and diverse development opportunities. These **Building Development Sites** as well as the **Open Spaces** and **Rights-of-Way** that connect them not only reinforce the economic vision for both Almono, but also the qualities that make Pittsburgh the most livable city for all people.

Almono LP is committed to catalyzing regional economic change by the thoughtful development of

this site. While individual developments cannot be predicted, Almono LP intends to attract uses that focus on advancing research of alternative fuels, sustainable land practices, green technologies, and other visionary industries that will propel the site and the region to the vanguard of economic development.

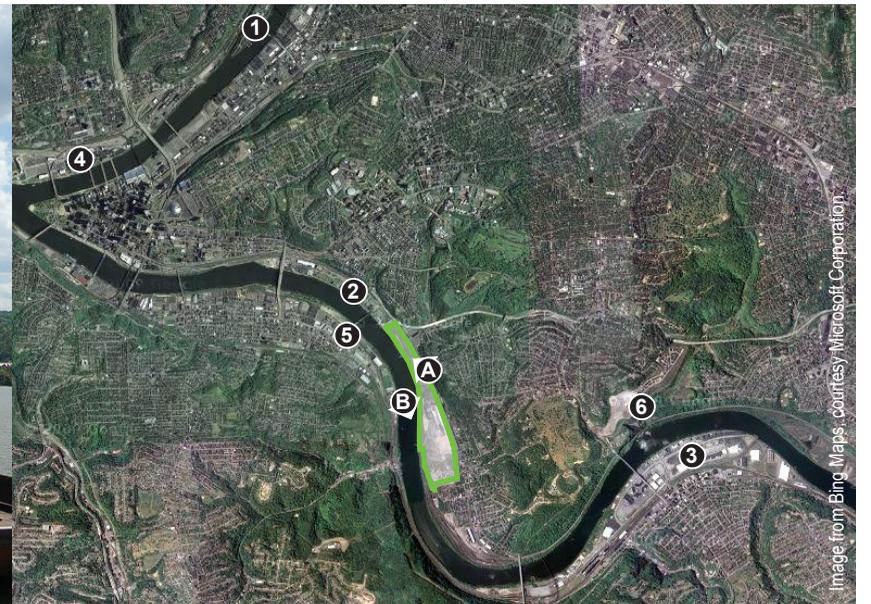
The development at Almono also makes a clear connection between this economic development, quality of life factors, and the creation of meaningful neighborhood places, which will catalyze community restoration throughout the region.



A View of toward downtown, from the Almono site.



B View of a barge docking on the Monongahela River at the Almono site.



Regional Map depicting Almono site and brownfield redevelopment around Pittsburgh



1 Washington's Landing, mixed-use development with Riverfront trail



2 Pittsburgh Technology Center, high-density offices near educational institutions



3 The Waterfront, a retail center across three towns, built through multi-municipal cooperative effort



4 Mixed-Use large-scale entertainment destination integrated with high quality fixed transit



5 South Side Works, high-density mixed-use development connected to existing street grid



6 Summerset, residential neighborhood coordinated with urban park plan

WORK FORCE AND JOBS

Industry Assets

The intention of the site is to provide jobs at a variety of income levels to serve the breadth of the population in Pittsburgh. Jobs will range from retail, industry and manufacturing, high technology, and research development. Jobs and industry shall be located in proximity to a diversity of neighborhood housing.

A range of industries will provide opportunities across the economic spectrum. Pittsburgh SNAP provides a detailed analysis of existing jobs and educational attainment across each neighborhood sector as

potential industries and workforce development opportunities are considered in relation to this site.

This site has numerous features that establish it's ongoing role in job development. These assets include:

The **Site Location** is in close proximity to the regional economic generators of Downtown Pittsburgh and Oakland. With it's central location, this site can serve the expansion of local corporations and industries related to the universities and medical fields.

The **Industrial River's Edge** can be an asset for potential industries. Currently, barges regularly utilize the infrastructure for docking.

The **Rail Infrastructure** along Second Avenue and the River's Edge can provide opportunities for barge to rail access to serve industry on the site.

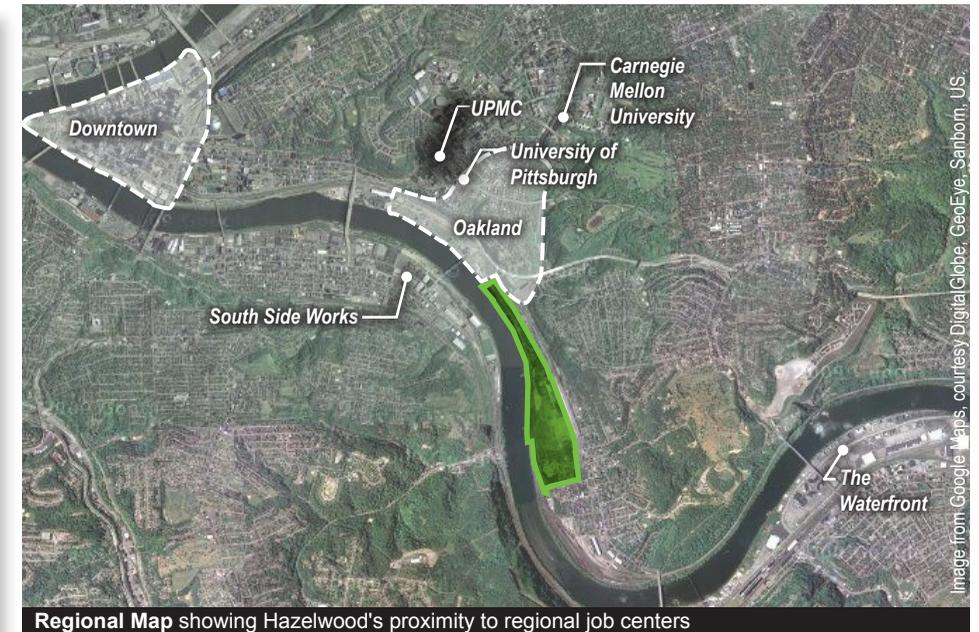
JOBS

SUMMARY

- Most residents work in the fields of education, health care, and social services
- Retail, arts, entertainment, and recreation are large employment fields
- Oakland, Shadyside, Southside, and the Bluff have the largest number of jobs

City of Pittsburgh	ECONOMIC DEVELOPMENT												
	Hazelwood	Sector 9	Glen Hazel	North Oakland	South Oakland	Central Oakland	Sector 10	Sector 12	Sector 7	Sector 15	Middle Hill		
333,527	5,334	7,832	865	9,857	3,007	2,272	5,281	14,507	13,754	5,726	6,423	2,724	2,143
144,768	1,849	4,153	185	3,189	1,363	833	3,085	7,170	7,810	2,948	1,531	765	728
4.3%	6.3%	5.3%	5.4%	0.7%	3.4%	0.0%	2.4%	1.2%	1.4%	3.4%	0.0%	1.6%	1.8%
4.1%	5.5%	4.2%	0.0%	2.4%	8.2%	2.2%	5.7%	4.3%	4.3%	11.0%	5.2%	9.5%	4.9%
10.3%	10.4%	12.2%	13.0%	8.6%	6.7%	14.5%	12.5%	7.0%	7.7%	11.0%	11.8%	5.6%	8.1%
4.6%	5.6%	4.8%	0.0%	1.2%	4.3%	5.8%	1.7%	1.1%	1.7%	2.2%	0.7%	8.5%	8.4%
3.4%	3.8%	2.7%	0.0%	5.4%	2.9%	4.9%	1.8%	3.9%	3.4%	3.8%	3.5%	9.4%	7.7%
8.8%	9.6%	7.2%	9.7%	2.8%	10.2%	4.0%	4.7%	7.0%	4.1%	9.0%	5.9%	8.8%	12.1%
11.1%	8.6%	9.3%	13.0%	10.6%	11.5%	7.2%	8.6%	12.2%	19.0%	17.5%	5.0%	13.6%	9.3%
29.9%	26.6%	30.2%	40.5%	50.8%	27.2%	39.1%	37.8%	46.5%	40.2%	23.3%	48.5%	23.1%	24.7%
10.4%	12.4%	10.8%	3.8%	13.0%	15.3%	14.3%	19.1%	6.1%	10.4%	9.2%	16.8%	5.6%	9.6%
4.4%	3.0%	5.3%	3.8%	0.7%	3.8%	1.4%	2.3%	0.2%	2.3%	3.2%	0.4%	8.6%	5.2%
7.5%	6.4%	7.8%	10.8%	3.9%	6.6%	4.6%	3.1%	9.5%	5.0%	6.5%	2.1%	5.4%	8.1%
283,902	1,219	795	370	18,174	3,830	12,895	3,862	3,854	9,027	10,170	8,800	884	475
4.6%	8.6%	10.1%	9.5%	0.9%	6.3%	1.6%	0.8%	2.9%	2.4%	6.4%	1.9%	1.1%	0.0%
6.4%	13.6%	2.5%	0.0%	1.9%	6.0%	1.3%	1.3%	1.4%	1.9%	11.1%	2.3%	2.3%	0.0%
4.8%	4.5%	11.9%	0.0%	2.2%	1.8%	1.0%	11.3%	16.5%	10.9%	10.1%	3.2%	2.8%	7.4%
5.3%	11.1%	3.8%	0.0%	0.8%	2.3%	0.5%	1.3%	0.8%	4.1%	8.1%	1.1%	0.5%	0.0%
4.3%	1.6%	4.4%	0.0%	3.1%	1.7%	0.3%	1.4%	1.9%	1.3%	3.6%	1.2%	2.3%	0.0%
10.9%	0.8%	6.9%	6.8%	2.4%	0.3%	0.8%	4.4%	9.2%	4.6%	5.5%	1.8%	5.1%	7.4%
12.7%	1.6%	10.7%	0.0%	5.7%	6.5%	3.1%	4.0%	6.5%	6.3%	9.4%	8.3%	4.0%	9.5%
38.4%	14.8%	17.0%	75.7%	69.5%	60.4%	88.3%	47.5%	40.5%	32.8%	23.4%	72.4%	42.4%	40.0%
6.4%	3.3%	10.1%	0.0%	8.8%	1.7%	1.3%	18.5%	11.8%	7.4%	8.3%	1.5%	0.0%	10.5%
4.7%	27.9%	7.5%	8.1%	1.0%	8.5%	0.6%	1.4%	0.5%	0.6%	2.7%	3.1%	20.4%	5.3%
7.5%	10.2%	15.1%	0.0%	2.3%	4.6%	1.3%	5.8%	8.0%	8.0%	11.5%	3.4%	19.2%	20.0%

Draft





Planning for New Industry

Each district across the site will accommodate a different mix of building development with opportunities for a wide array of work environments, industry types, and density. The intent for development across each district is identified below. The actual development will depend on market demand and will be the purview of Almono LP to establish.

Riverview is intended to be a connected high-density job center to attract building development and take advantage of the proximity to Downtown and Oakland as well as it's relationship to the riverfront and the Signature Boulevard.

Smart Site Central Green can be a location for focused research and development that advances transportation, alternative energy and renewable resources, and sustainable land practices.

Eco-Tech Park seeks to house clean industries providing job opportunities located in close proximity to the surrounding neighborhoods.

Hazelwood Flats will be mixed-use, offering retail amenities and opportunities to residents while connecting to the existing street grid of the adjacent neighborhoods. Adjacent to the neighborhood there is an opportunity to provide small scale, neighborhood serving industry.



- Commercial Office
- Mixed Use (office, residential, retail)
- Industrial Use
- Green Tech Use
- Almono Site Property Line
- District Boundary

LAND USE



Development Program and Land Use Intent

Development Program

The PLDP establishes the intended balance of land use between the three types of land: rights-of-way, open space, and building development parcels. Final Land Development Plan(s) and Subdivision(s) will establish the actual location and size of these components.

Critical to the site's success is the mixture of uses across the districts as well as a mixture of uses within individual buildings. The intended land use for the building development parcels, identified in the chart below, represents a starting point for planning purposes. The actual development program will be established by Almono LP and prospective developers. There is flexibility in the site design to allow for an increase in the overall site density. More detailed information on the development program and permitted uses in each district is provided in Section 2.3, Building Development Guidelines.

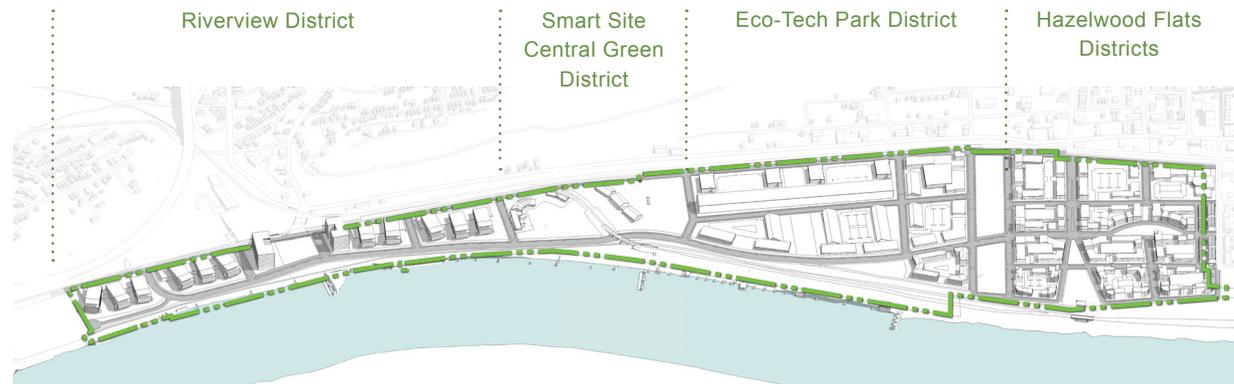
Land Use Intent

Riverview's long and shallow blocks present an opportunity to develop high-density, high-performance buildings oriented towards the river to maximize the value of the location. A mixture of uses is critical to activating the street and providing amenities for site uses and visitors.

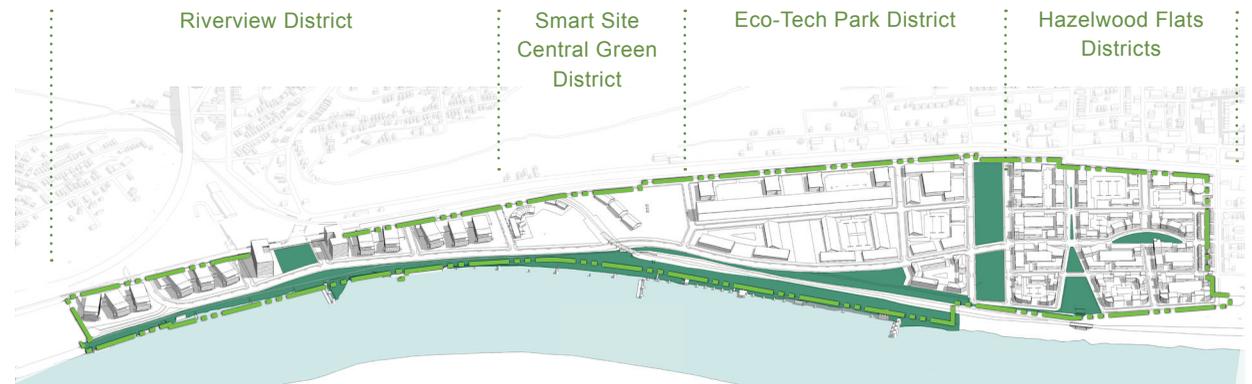
Smart Site Central Green's sloped lands and railroad path results in two large development blocks. This anticipates low-density uses that need additional land for programmatic purposes (other than parking).

Eco-Tech Park's larger-scale development blocks support industrial uses and related office uses facing the signature boulevard as well as potential for integral structured parking facilities along Second Avenue. The adapted reuse of Mill 19, existing river infrastructure, and commercial traffic access via Second Avenue create prime clean industrial economic development sites.

Hazelwood Flats has a series of development blocks are connected by a network of streets and open spaces to support a range of residential, commercial, and mixed-use building types in a dense and walkable district. The development block parameters are influenced by existing site forces found in adjacent neighborhoods.



Almono rights-of-way



Almono common open spaces



95 acres

Almono total parcel area

56 acres

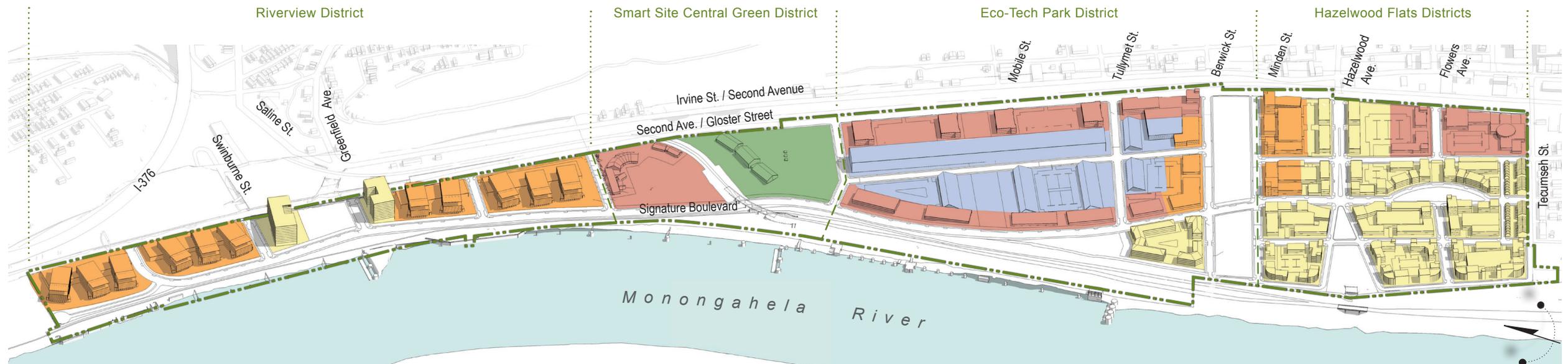
Proposed Almono rights-of-way area

27 acres

Almono site area dedicated toward Common Open Space

Development and Land Use Table

Program		Total SF / Units		Riverview		Smart Site Central Green		Eco-Tech Park		Hazelwood Flats	
Industrial		691,645		-		-		649,645		-	
Green Tech		36,000		-		36,000		-		-	
Commercial		539,340		-		36,000		277,920		225,420	
Mixed Use		2,108,850		1,986,000		-		-		122,850	
Residential		1,984,000 sf	1320 units	420,600 sf	280 units	-		234,000 sf	155 units	1,329,400 sf	885 units



Almono land use diagram

The actual distribution of land use will be determined by market forces and will be articulated through the Final Land Development Process.

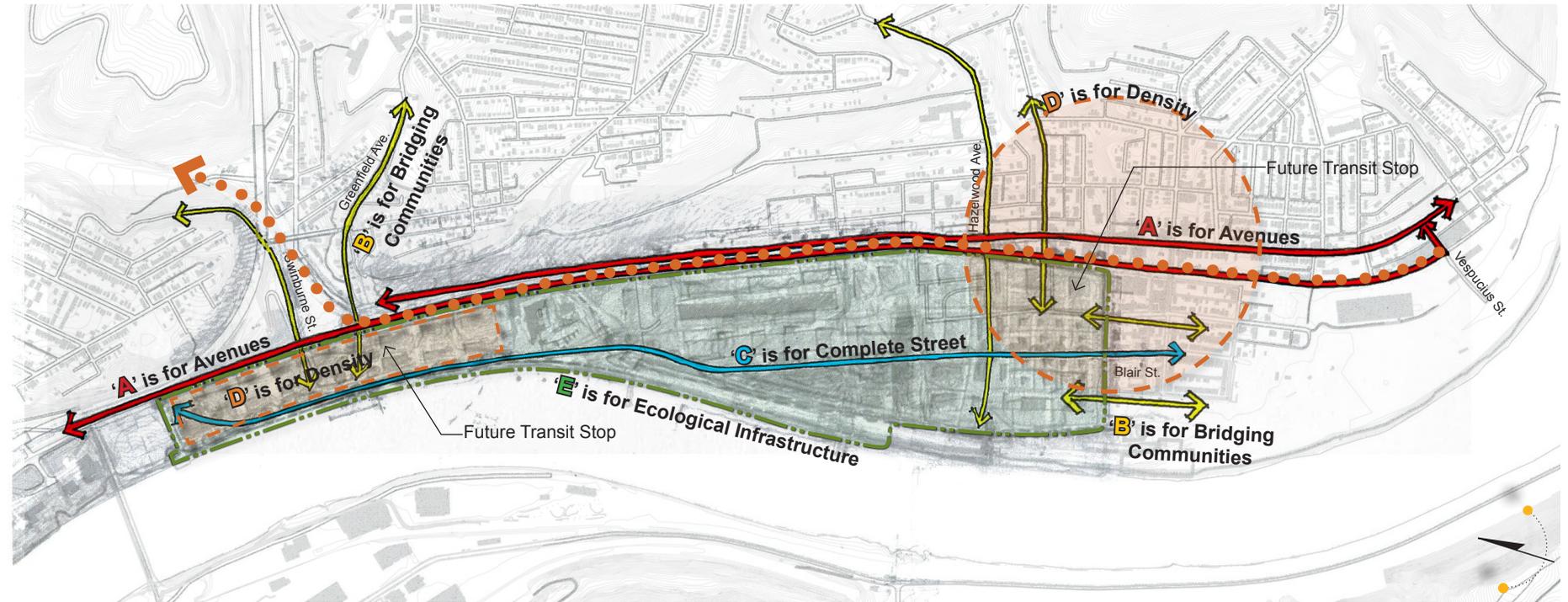
Commercial Office
 Industrial Use
 Mixed Use (office, residential, retail)
 Green Tech Use
 Residential Use (with potential ground floor retail)
 Almono Site Property Line
 District Boundary

URBAN DESIGN

Urban Design Principles

This PLDP document establishes design parameters for site connection, infrastructure systems (both on and off site), and placemaking imperatives. These work together to integrate this site into the network of the surrounding communities and region.

Development proposals shall align with these principles and demonstrate how they further support these goals within the proposed developments.



Almono ABCs

A is for Avenues

Pittsburgh's most vibrant plateaus are served by dual avenues with different but related capacity: Fifth/Forbes; Baum/Center; Penn/Liberty/Smallman. The Signature Boulevard works with Second Avenue & Irvine Street for lateral access across this river plateau.

B is for Bridging Communities

Communities of Proximity, Interest, Leadership and Action have been identified and engaged through the planning process to create a development that aligns with the desires and serves the needs of existing communities.

C is for Complete Street

Create a Signature Boulevard through the site that integrates the movement of pedestrians, bikes, cars, energy/utility systems, and stormwater.

D is for Density

Allows a density that, coupled with adjacent land development, could warrant future transit at the North and South ends of the site.

E is for Ecological Infrastructure

An integrated infrastructure that simultaneously manages stormwater and serves as an open space amenity, can serve & increase the value of adjacent developable land.



Fifth and Forbes Avenues in Oakland



Community Meeting in Greenfield



Example of a buffered cycle track



View of Central Oakland



Example of integrated rain gardens

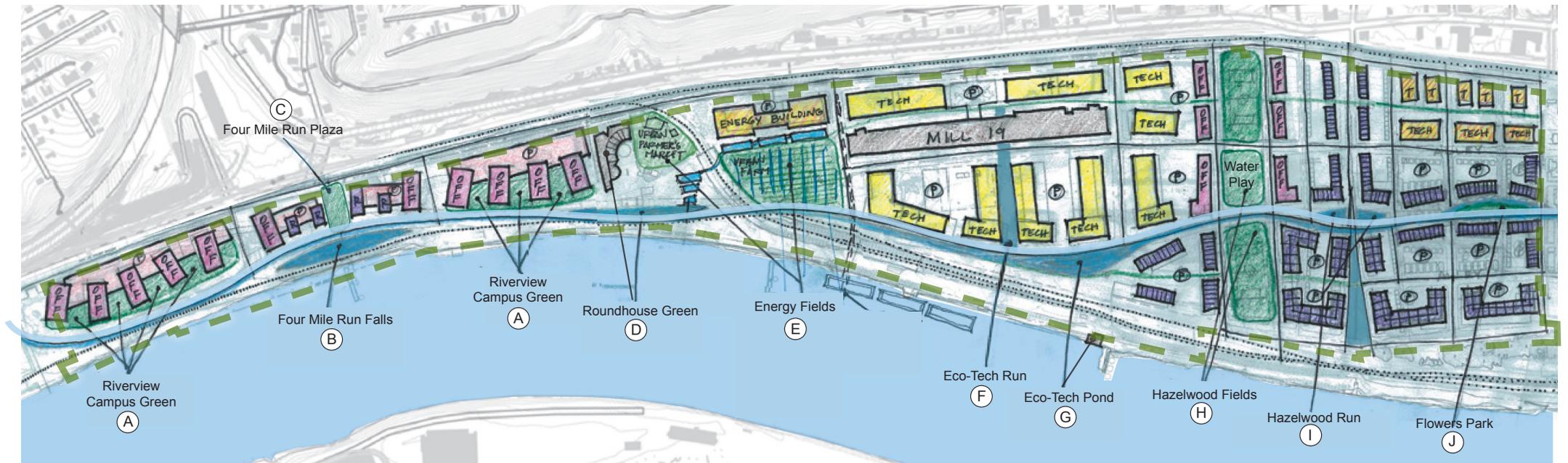


Almono Placemaking

The four site districts and surrounding city neighborhoods are connected to the Monongahela riverfront by a Signature Boulevard, Almono's organizing feature. As this boulevard flows across the site, a series of common open space and parcel based open spaces become defining experiences that work in concert with public art, adjacent uses, and destinations to create an active riverfront connecting neighborhoods with places to live, work, and play. High value development parcels focus toward and reinforce the activity of memorable and distinct site places.

A more detailed description for each place can be found in Section 2.2, Open Space.

- (A) Riverview Campus Green
- (B) Four Mile Run Plaza
- (C) Four Mile Run Falls
- (D) RoundHouse Green
- (E) Energy Fields
- (F) Eco-Tech Run
- (G) Eco-Tech Pond
- (H) Hazelwood Fields
- (I) Hazelwood Run
- (J) Flowers park



SOCIAL VISION

Transparency, Access, and Accessibility

Almono LP and development team members realized that because the Almono Site has the ability to positively impact such a broad range of communities, an atmosphere of inclusion would be necessary to create a development that serves the breadth of the community. This became the driver for the social vision of the project.

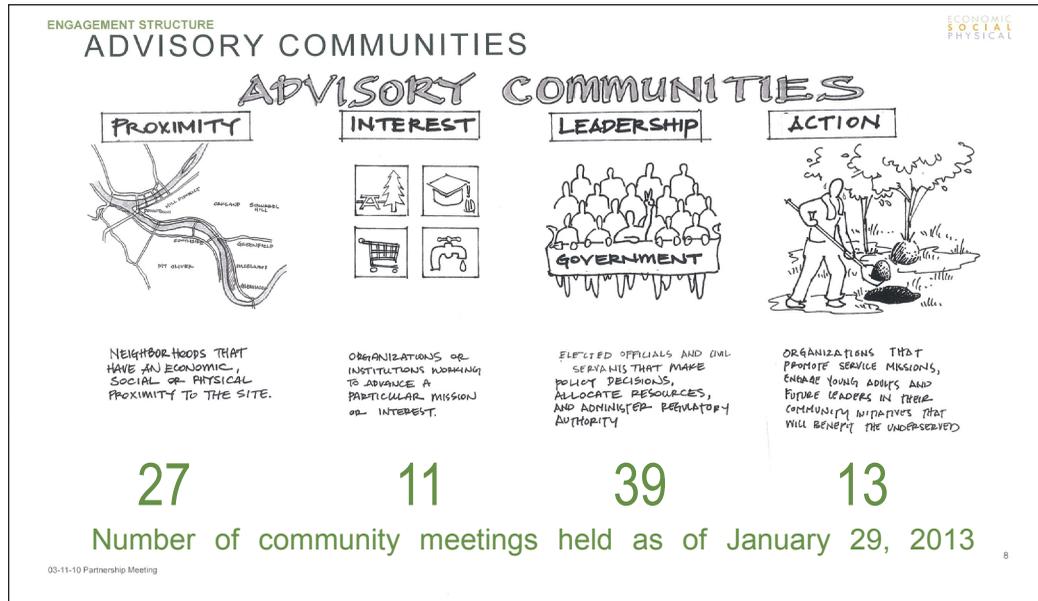
The principles established by the Almono LP team revolve around strategies of access and accessibility. By collaborating with the existing community and working to serve a wide range of interests and needs, the planning

process provided access to the project to all those interested in participating.

The Almono site seeks to strengthen and advance the spirit of access for all by providing access to the riverfront for residents and visitors. Meaningful and engaging public places will welcome all people to the site and lead them to the riverfront, which is one of Pittsburgh's greatest natural resources.

Provision of access for all people carries with it the need to ensure that all people will be able to use the site without physical barriers. The site not only seeks to provide full accessibility for those who are differently-abled, but also features sensitive design components at multiple scales to facilitate the comfort of residents and visitors alike.

The Almono site seeks to maximize both access and accessibility to ensure that residents and visitors are able to fully utilize the amenities provided.



September 21, 2011 Hazelwood Community Meeting



June 21, 2012 Glen Hazel Community Meeting

ADVISORY COMMUNITIES Identifying participants in visioning process

Accessibility Framework

Developments must comply with all local, state, and federal accessibility requirements.

Dwelling Units

A certain percentage of single and multifamily units should be designed in accordance with ICC/ANSI A117.1, Type C, Visitable prescriptions and applicable LEED-ND credit requirements. In addition, Pittsburgh City Council has introduced an ordinance that would require single family residences where public funds are part of the project be visitable.

At a minimum, residences not served via an elevator should incorporate zero-grade entrances at the side or rear yards and 32-inch doorways and half or full baths on the first floor.

Visitable Public Realm

Mixed-use communities should offer a wide range of residents and visitors the ability to participate in the public realm. Non-residential uses can incorporate Terrace Frontages to supply at grade access while accommodating street-level grade changes, providing

a series of shop front entrances or outdoor seating. Street intersections shall comply with City of Pittsburgh standards and include audible controls and textured detection pads.



EDUCATION AND WORKFORCE DEVELOPMENT

Educational Assets

The site's intention is to become a center for education and workforce development, closely connected to the universities and institutions located nearby. The focus on sustainable research and green technologies will provide jobs for neighborhood residents as well as providing knowledge of emerging workforce sectors.

Pittsburgh SNAP provides a detailed analysis of existing educational attainment and income across the surrounding neighborhoods as institutions and laboratories consider the possibilities this site has to offer.

The **Site Location** is in close proximity to Oakland, home to the University of Pittsburgh, and Carnegie Mellon University, highly renown research institutions. University of Pittsburgh Medical Center, a leading research and teaching hospital is also located in Oakland. This site's location can serve the expansion of university laboratories as their research moves from theoretical to practical.

The site can also provide jobs for residents of the **Existing Neighborhood**. As innovative technology

companies establish themselves on site, training in these emerging or green industries can be provided to job seekers from the surrounding area.

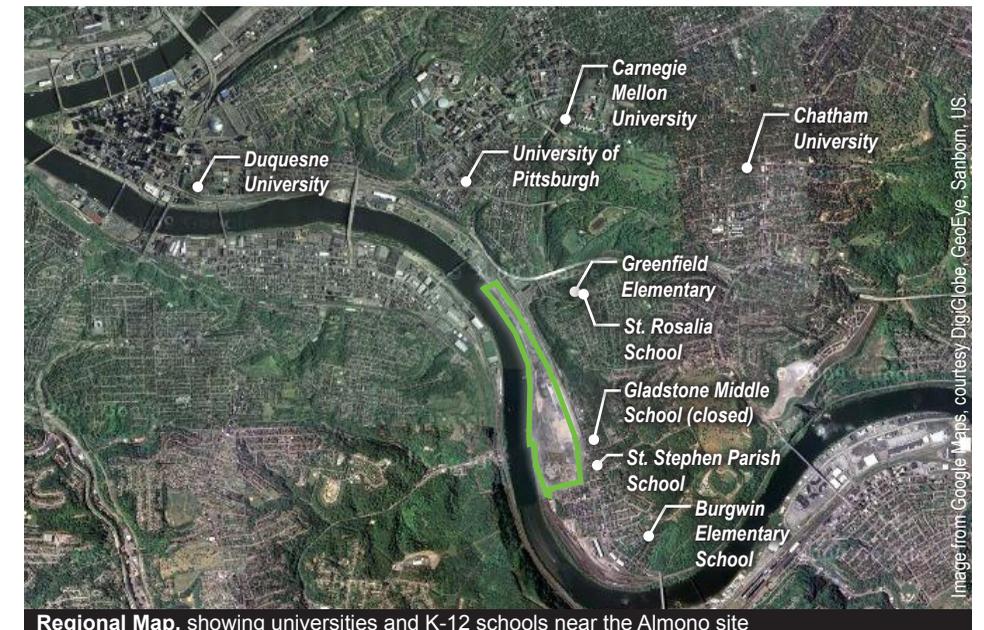
The commitment to advancing sustainable practices and instructing and training job seekers in those practices will solidify the site's position as a worldwide center for innovation.

EDUCATION & INCOME




		Sector 9			Sector 14				Sector 10	Sector 12	Sector 7	Sector 15		
City of Pittsburgh	Population (2000)	Hazelwood	Greenfield	Glen Hazel	North Oakland	South Oakland	West Oakland	Central Oakland	Squirrel Hill South	Shadyside	Southside Flats	Bluff	Crawford-Roberts	Middle Hill
333,327	5,134	7,882	805	9,857	3,007	2,272	5,281	14,507	13,754	5,726	4,421	2,724	2,143	
221,549	3,598	5,878	562	3,255	1,887	974	1,537	10,522	11,077	4,177	638	1,779	1,548	
18.8%	HIGHEST LEVEL COMPLETED:													
48.8%	Less than High School	28.5%	13.6%	48.8%	6.7%	18.1%	23.7%	7.0%	6.4%	23.4%	32.9%	27.6%	28.6%	
6.1%	High School Graduate	53.5%	50.7%	39.7%	21.8%	45.9%	46.6%	38.8%	25.6%	21.1%	45.1%	49.1%	55.3%	
13.6%	Associate's Degree	6.3%	5.8%	4.1%	4.7%	8.7%	6.8%	4.2%	4.3%	3.9%	6.3%	3.3%	6.1%	
12.6%	Bachelor's Degree	7.1%	15.8%	4.1%	28.4%	17.4%	5.6%	30.2%	26.8%	28.0%	18.0%	4.1%	6.6%	
12.6%	Postgraduate Degree	4.6%	14.0%	3.4%	38.4%	9.9%	17.5%	24.9%	36.2%	41.6%	7.3%	10.7%	6.4%	
INCOME AND POVERTY (2000)														
\$26,563	Median Income (1999 Dollars)	\$24,612	\$35,613	\$9,315	\$41,532	\$24,190	\$33,517	\$14,888	\$40,327	\$35,709	\$24,700	\$11,515	\$13,449	\$21,633
\$34,532	Med. Income (Adj. for Inflation, 2000)	\$31,996	\$46,297	\$12,110	\$52,991	\$31,447	\$30,572	\$19,254	\$52,425	\$46,421	\$32,110	\$14,970	\$17,484	\$28,123
313,383	Pop. for which Poverty Calculated	5,311	7,763	602	5,519	6,094	1,302	5,035	8,260	1,424	73	1,083	2,693	2,108
43,844	Population Under Poverty	1,232	434	348	2,190	942	386	2,781	1,373	2570	1,238	425	897	797
26.4%	Percent Under Poverty	24.0%	7.9%	60.5%	39.7%	28.0%	29.6%	55.2%	11.3%	19.7%	22.2%	58.6%	33.3%	33.5%

03-11-10 Partnership Meeting





LearnPGH Coordination

The intention of the site is to serve as a center for innovative thinking and leadership. Uses that align with this goal will be considered for the site. The type of innovation for learning will determine which district best aligns with the character of the proposed development.

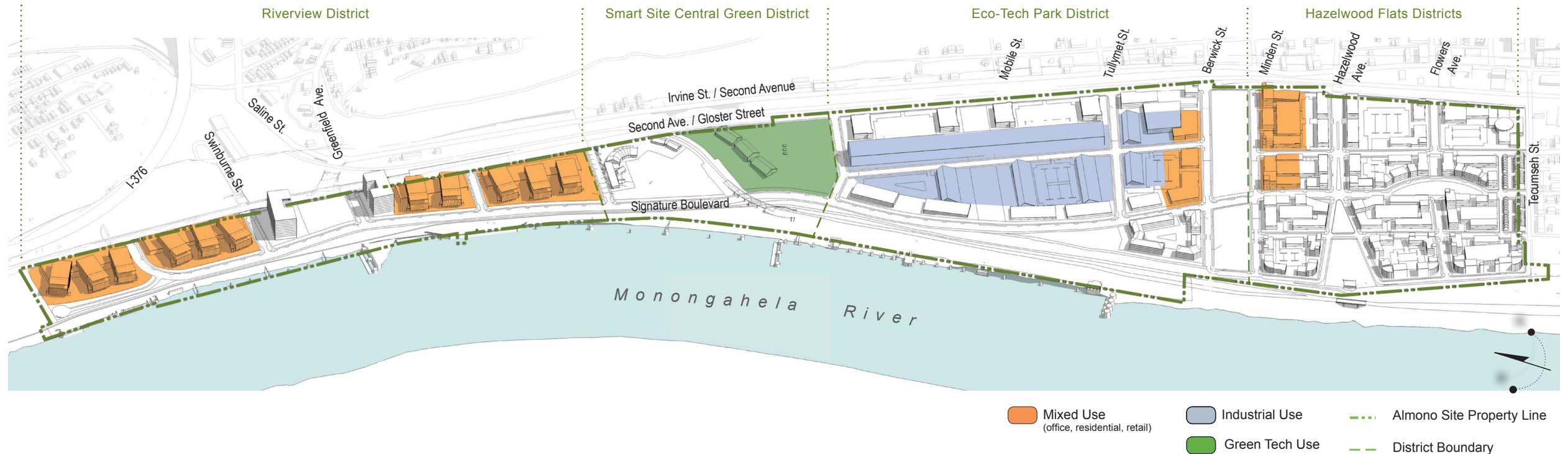
Located near several major research institutions, such as University of Pittsburgh and Carnegie Mellon University, and close to the Pittsburgh Technology Center, the Almono Site is poised to become home to regional and national leaders in research, technology, and workforce development.

Riverview seeks to house applied research and development, providing a location where local universities and educational institutions can expand their existing laboratory facilities.

Smart Site Central Green aims to be a center for environmental and land research, and intends to be at the forefront of research regarding alternative energy and fuel sources.

Eco-Tech Park will be a center for applied technical knowledge. The clean industries this site intends to attract will help to create new job opportunities that will benefit and inform the surrounding neighborhoods.

Hazelwood Flats will focus on community learning. Workforce development opportunities in the neighborhood will positively impact not only residents of the development, but also those living in the surrounding communities.



HOUSING

A Place to Call Home

This site aims to provide housing of varying scales and sizes to accommodate the breadth of the population. Housing that is attainable for people of different incomes, ages, or with other special needs will be considered as individual developments occur.

This range of housing types will provide opportunities across the economic and demographic spectrum. Pittsburgh SNAP provides a detailed analysis of existing housing across the neighborhoods that currently surround the site.

With the opportunity to provide housing for a range of incomes and ages in close proximity to amenities and surrounding neighborhoods, this site will become a place that people love to call home.

The **Site Location** is in close proximity to Downtown Pittsburgh as well as Hazelwood, Greenfield, and the Southside. These neighborhoods each provide housing of different scales. This site will respond to the predominant housing types that give each of these neighborhoods their unique character.

A combination of condominiums or apartment-style housing, attached townhomes and rowhouses, and single family homes will be provided on the site. The locations of each of these housing types on site has been carefully chosen in order to respect the vernacular of the site's context and to give each district of the site unique character.

Affordable housing development is encouraged to be of comparable square footage and exterior appearance as market rate development. Affordable housing may be interspersed with market rate housing, where feasible.



Existing Hazelwood Homes, The site responds to the neighborhood context, which features single-family houses as well as rowhouses.

HOUSING

SUMMARY

- Hazelwood and Greenfield have a higher than average duration of residency and more owner occupied homes than rental units
- Five of the thirteen neighborhoods have a vacancy rate greater than the City average
- Greenfield, Squirrel Hill, and the Southside have seen the largest increase in property values

	Sector 9				Sector 14				Sector 10	Sector 12	Sector 7	Sector 15	
City of Pittsburgh	Hazelwood	Greenfield	Glen Hazel	North Oakland	South Oakland	West Oakland	Central Oakland	Squirrel Hill South	Shadyside	Southside Flats	Bluff	Crawford-Roberts	Middle Hill
333,527	5,334	7,832	805	4,003	3,007	2,272	5,281	14,507	8,451	5,726	6,423	2,744	2,143
163,414	2,746	3,873	287	2,058	1,558	1,138	2,555	7,069	4,151	3,613	721	1,540	1,334
88.0%	83.4%	93.3%	94.1%	90.9%	89.7%	84.0%	90.6%	96.0%	94.2%	86.7%	64.9%	90.6%	73.7%
12.0%	16.6%	6.7%	5.9%	9.1%	10.3%	16.0%	9.4%	4.0%	5.8%	13.3%	35.1%	9.4%	26.3%
143,786	2,389	3,614	270	3,638	1,398	536	2,316	6,783	3,334	3,134	768	1,336	983
52.0%	61.1%	67.0%	6.4%	24.3%	46.4%	43.3%	11.1%	63.6%	26.1%	42.2%	27.1%	20.2%	44.6%
48.0%	34.9%	11.0%	99.6%	75.7%	53.6%	56.7%	88.3%	36.4%	73.9%	56.8%	72.9%	79.8%	55.6%
13.5	16.3	14.8	11.4	9.7	12.0	10.0	6.7	11.1	7.5	10.9	9.0	8.4	14.2
319,552	5,334	7,832	805	4,003	3,007	2,272	5,281	14,507	8,451	5,726	6,423	2,744	2,143
23,843	28	239	432	31	88	280	389	764	177	177	177	177	177
93.1%	100.0%	99.9%	70.3%	55.6%	97.5%	56.5%	94.5%	96.9%	94.5%	97.0%	14.1%	97.0%	14.1%
8.9%	0.0%	0.1%	29.7%	44.4%	2.0%	43.5%	5.5%	4.1%	5.5%	8.9%	3.6%	8.9%	3.6%
163,414	2,746	3,873	287	2,058	1,558	1,138	2,555	7,069	4,151	3,613	721	1,540	1,334
3,834	28	61	9	94	81	35	103	138	107	141	0	129	73
5,925	116	61	4	49	183	8	49	257	481	56	27	229	87
32,588	239	349	178	916	1,110	181	469	1,176	2,109	159	61	389	201
45,048	547	1,358	52	1,018	274	217	839	2,001	3,223	409	144	235	509
63,371	1,256	2,039	12	1,266	918	261	1,085	3,505	3,567	2,289	422	395	452
2.3%	1.0%	1.6%	3.1%	2.3%	5.2%	5.7%	4.0%	2.0%	3.9%	0.0%	27.2%	5.4%	4.2%
3.6%	4.2%	1.6%	14.0%	10.2%	11.7%	1.9%	1.9%	3.6%	5.3%	1.6%	3.6%	21.0%	6.9%
15.8%	13.0%	9.0%	61.0%	22.9%	7.1%	14.5%	18.8%	16.6%	24.9%	4.4%	28.3%	18.5%	14.9%
27.6%	19.9%	35.1%	17.8%	25.4%	17.6%	35.5%	32.8%	28.3%	26.3%	11.3%	19.4%	14.4%	37.8%
56.7%	62.9%	52.7%	4.1%	39.1%	58.4%	41.0%	42.4%	49.3%	42.2%	78.8%	56.7%	18.9%	35.2%
\$53,233	\$38,700	\$45,800	N/A	\$22,423	\$47,700	\$47,500	\$62,100	\$134,633	\$153,560	\$77,100	\$40,400	\$76,800	\$30,200
\$64,142	\$47,026	\$59,329	N/A	\$23,408	\$48,008	\$37,774	\$79,774	\$199,681	\$199,073	\$103,644	\$59,317	\$85,444	\$33,240
25.0%	22.7%	19.3%	N/A	5.8%	23.5%	23.1%	28.5%	48.3%	23.1%	34.4%	24.0%	20.7%	76.4%
\$75,890	\$163,130	\$103,000	\$53,530	\$162,000	\$95,000	\$23,200	\$123,950	\$179,200	\$288,000	\$47,500	\$105,000	\$42,500	\$42,500
4,444	777	127	47	43	20	38	216	216	149	18	19	14	14
1,199	28	23	0	1	10	3	3	12	8	18	0	1	4
0.7%	1.0%	0.6%	0.0%	0.0%	0.6%	0.6%	0.6%	0.2%	0.1%	0.5%	0.0%	0.1%	0.3%

Annotations on the table include: 'Highest vacancies' pointing to Sector 15, 'Continued growth' pointing to Sector 14, 'The most new construction - 11% of the new units in the city as a whole' pointing to Sector 15, and 'Lowest median sale price' pointing to Hazelwood.



LivePGH Coordination

To align with the current PlanPGH process, the Almono PLDP outlines the intent of this site relative to the Plan-PGH systems:

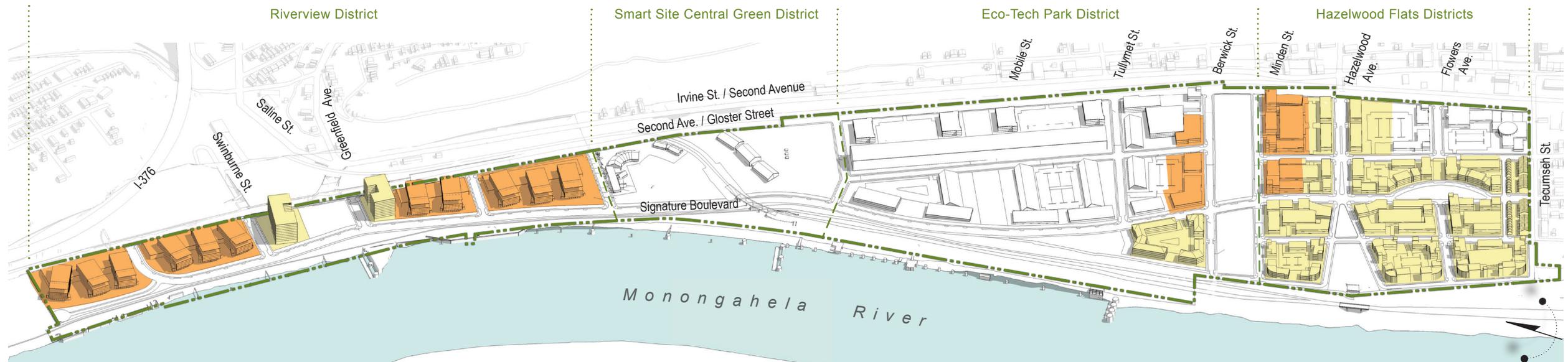
The intention of the site is to provide high quality dwellings that compliment the housing stock in the surrounding neighborhood. Efforts shall be made to provide affordable housing for households earning below the area median income and to achieve a diversity of housing in relation to the surrounding community. **Reference standard: LEED ND 2009 NPD Credit 4**

Riverview intends to be a mixed-use location, offering high-rise condominiums and apartments in close proximity to research and development laboratories.

Smart Site Central Green is not anticipated to house residential uses at this time.

Eco-Tech Park will provide rental housing around the provided open spaces, potentially offered in concert with local universities.

Hazelwood Flats will be a mixed-use neighborhood with a strong connection to the single-family homes in the surrounding neighborhoods. Townhomes, condominiums and apartments will be provided, with a focus on serving the breadth of the population by offering mixed-income, age-restricted, or workforce housing.



PUBLIC ART

Public Art

Public Art has contributed to Pittsburgh's urban fabric by telling the story of neighborhoods and moments in the history of the region as well as the United States.

The Almono Site provides an opportunity to contribute a new way to explore and experience both the history of the site and its future role in shaping Pittsburgh's landscape.

In addition to providing site identity, a successful public art vision aligns with the site's larger goals of economic

development, cultural education, and place-making. An important educational connection can be established that links public art to community engagement and cultural education.

Public art installation should consider the City of Pittsburgh's goals for accessible public art and incorporate the City's recommendations where possible.

Both the Open Space network and Trails network provide the framework for public art installations contextually located within the broader public realm vision.

Signature Commissions

An opportunity exists to commission a number of special installations that anchor important public spaces. These pieces could incorporate the reuse of industrial materials reclaimed from the site and re-purpose existing on-site building materials and industrial elements.



-  Potential Public Art Events
-  Public Art Zones
-  Almono Site Property Line
-  Parcel Open Space
-  Common Open Space
-  District Boundary

PUBLIC ART



Sculpture at Hot Metal Bridge recalls Pittsburgh's steel industry heritage



Building mural in Oakland honors community diversity



Sculptures celebrate Pittsburgh's bridges and noteworthy historic figures



Sculpture in 3 Rivers Park, Allegheny River Trail at Sixth Street

CULTURAL HERITAGE

Former Industrial Elements

The intent of development is to honor the site's history and role in the growth and development of the region. Items from the site's former industrial use will be retained where economically feasible. These items fall into three categories: buildings, site elements, and river infrastructure.

Buildings

The site contains three industrial buildings that will be retained if a new and compatible use is identified. These buildings include the former railroad round house, the Mill 19 building and the pump house.

Site Elements

The site contains a large coal drop along the edge of the river. This element may be incorporated into the open space design. The site contains a series of light poles which are made of either entirely of steel or a combination of wood and steel. The steel poles will be removed and relocated as part of the open space design. Additionally, the steel could be salvaged for reuse as public art, new high-bay elements, or light art.

River Infrastructure

The river edge of the Almono site served a key role in the exchange of goods between barge and rail. It contains a series of large yellow dolphins and icebreakers that jut out into the river. These items will be retained. There are a series of platforms and walkways along the river's edge that are being removed as they have deteriorated beyond repair. The reuse or re-purposing of this infrastructure is to be determined.





A Roundhouse



B Mill 19



C Electrical Tower



D Pump House



E River Infrastructure



F River Break



G View toward Roundhouse

PHYSICAL VISION

Creating Great Places to Live, Work, and Play

The physical vision for this site respects the site realities such as the industrial heritage, property lines, sewer conditions, watersheds, and railroad rights-of-way while still advancing an aspirational design that incorporates best practices for building, planning, and sustainability.

The vision that integrates these realities with other challenging economic, and social, conditions that must be addressed in order for the site to welcome investment and reach its full potential.

The design emphasizes the riverfront location by organizing building development, stormwater systems, road, trail, park spaces, and innovative energy systems along the Signature Boulevard. This mixed-use, publicly active, landscaped “great street” flows from the site entrance to the existing Hazelwood neighborhood.

The Signature Boulevard, and the neighborhood and connector streets that intersect it, provide a verdant link between the river, valleys, and neighborhoods that surround and flow down through the site. View corridors are created to provide a visual link from the site to the

riverfront. Public spaces facilitate social interaction and create a strengthened community.

The physical vision for this site is both achievable and aspirational, and has required the careful study of the existing conditions, the natural systems, the community connections, and the infrastructure both in and around the site. The result is a series of **Building Development Sites, Open Spaces, and Rights-of-Way** that will be great places to live, work, and play, and which will attract innovative and sustainable investment.



Existing walkways along the Monongahela River, view toward Downtown Pittsburgh



Existing Roundhouse Building, in the Smart Site Central Green District



View toward Hot Metal Bridge and South Side Works

OPEN SPACE CONTEXT



Linking Communities of Proximity

Two major watersheds, Four Mile Run and Nine Mile Run, are located at the north and south ends of the Hazelwood neighborhood, respectively.

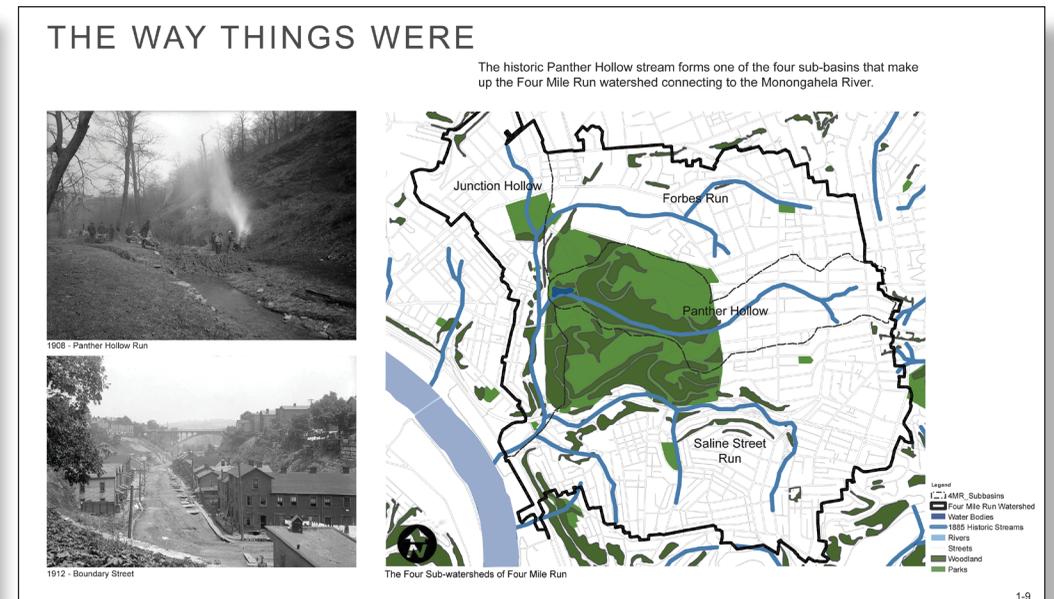
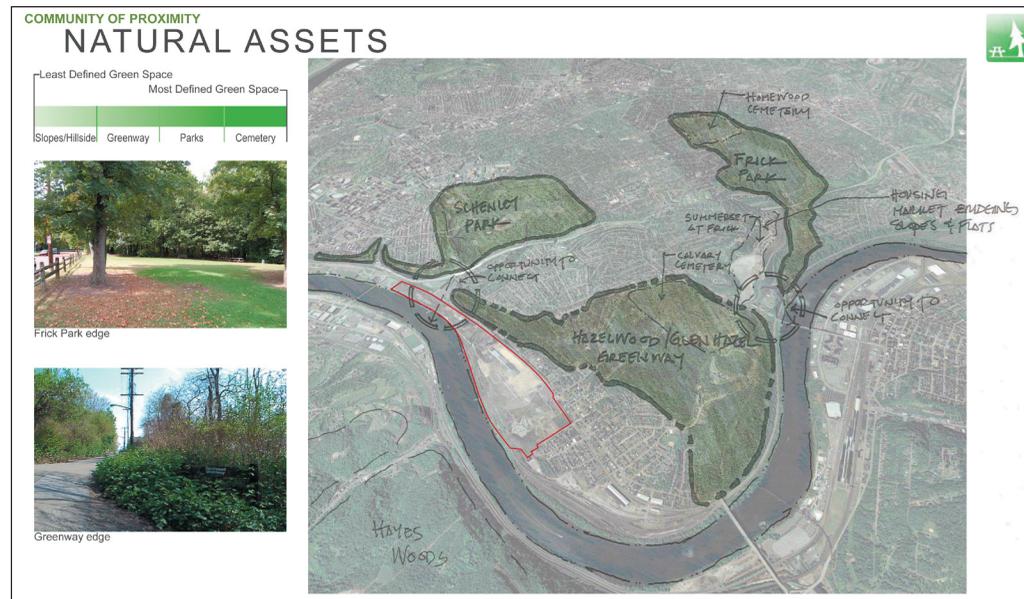
The neighborhoods of Squirrel Hill, Greenfield, Hazelwood, and Oakland comprise the Four Mile Run watershed, named for the urban stream running through Schenley Park. The stream was diverted into the present-day combined sewer system.

Nine Mile Run, located at the south end of Hazelwood, runs through the East End of Pittsburgh. Nine Mile Run runs above ground in Frick Park and through many smaller neighborhood parks, which facilitates stormwater absorption. Nine Mile Run, like Four Mile Run, has been largely piped into underground culverts.

These two watersheds flow through the Hazelwood Greenway, more than 70 acres of forested land

connecting Schenley Park and Frick Park. Hazelwood Greenway offers a unique opportunity for green infrastructure for stormwater mitigation, and a wildlife corridor for trails and recreation.

By strengthening this link between the two largest parks in the City of Pittsburgh, Schenley and Frick, the Hazelwood Greenway can help move both stormwater and people to the riverfront at the Almono site.



Connecting Watersheds and the Riverfront

The planning of the development districts of the Almono site takes into consideration the current riverfront conditions and the watersheds near and on the site. A major objective of Almono LP is to connect neighborhoods and people to the river.

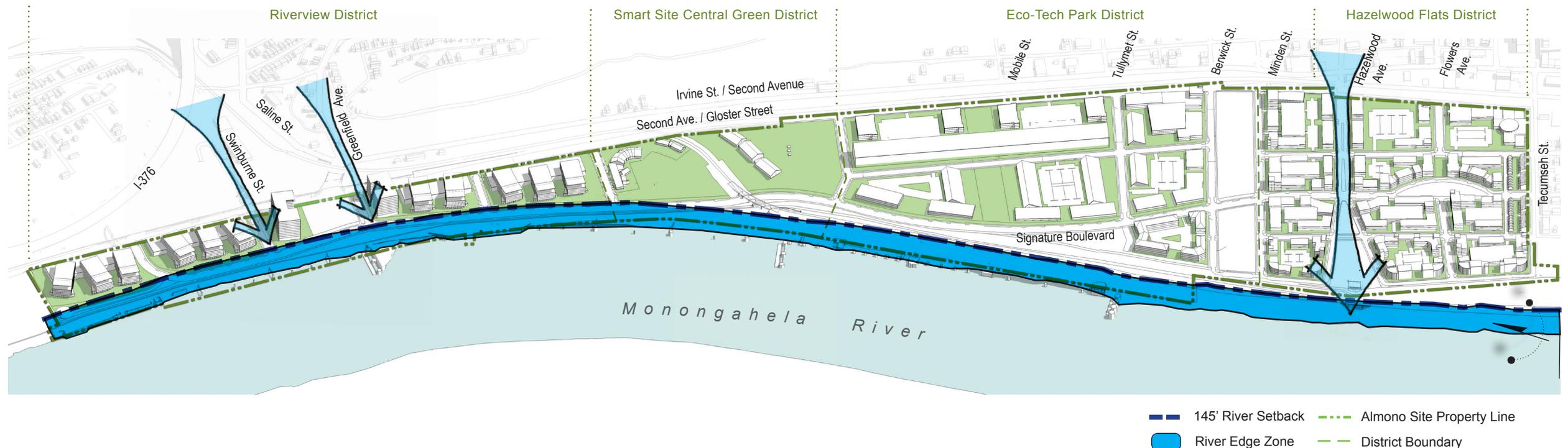
Portions of the site are located in the RF-O Riverfront District. For more information, see the City of Pittsburgh Zoning Ordinance, Section 906.03.

Buildings are set at a minimum of 145 feet from the river's edge, though where the conditions necessitate it, setbacks will range up to 560 feet. This conservative strategy toward river's edge development will aid in the restoration of natural watersheds and honor the natural ecosystems that exist at the river's edge.

The site design can accommodate the daylighting of Four Mile Run by others to the Monongahela through the **Riverview District**, where the water's edge condition mainly consists of existing retaining walls. This condition, along with steep slopes that meet the

river's edge, continue southward along the site through the **Smart Site Central Green** and **Eco-Tech Park Districts**.

At the **Hazelwood Flats Districts**, another historic run to the river will be restored. The gentle slope of the site at this area will allow people to use this historic run as a point of river access. This also provides an opportunity to connect to the Hazelwood Greenway. The greenway serves as a link into the regional open space network, connecting to the two largest parks in the City of Pittsburgh, Schenley and Frick.





Natural Hydrology and Infrastructure

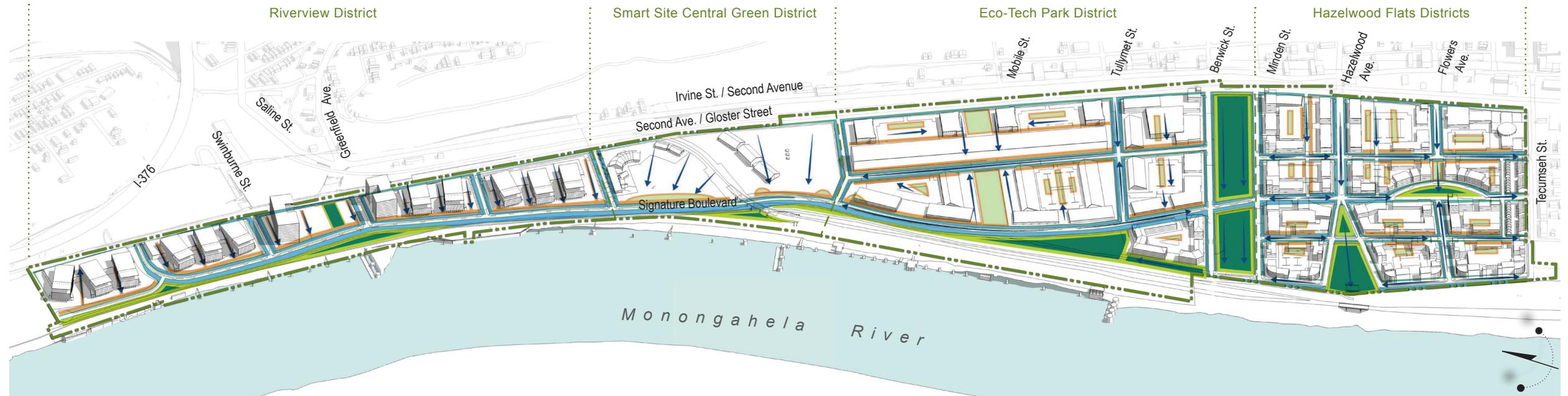
Between 19 and 27 acres of open space are planned for the Almono site. This open space is usable not only for recreational purposes but also functions as a means to treat and mitigate stormwater runoff into the Monongahela River as well as supporting the ecosystem of the surrounding area.

Open spaces serve as a type of green infrastructure to manage stormwater. The natural hillsides adjacent to the Almono site have led to the formation of natural watersheds that lead to the river's edge.

The Open Space on the Almono site will serve as a buffer between the hillsides and the river, treating the water flowing through the runs and slowing the water's flow where permitted. The Open Spaces will also allow infiltration to occur. This process will also reduce the number of pollutants that are discharged into the river.

More information on stormwater management and green infrastructure can be found in Section 3.1.

The Open Spaces of Almono are further categorized as being either parcel open space, or common open space. More information on the types of Open Spaces and their locations within the Almono site can be found about the types of Open Space in Section 2.2.

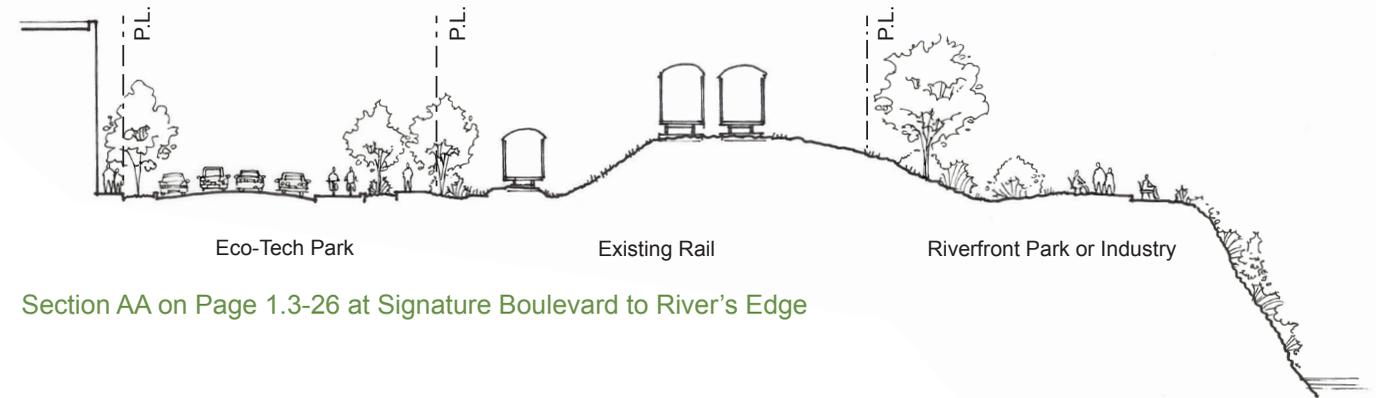


-  Open Space Green Infrastructure
-  R.O.W. Green Infrastructure
-  Almono Site Property Line
-  Parcel Green Infrastructure
-  Surface Water Flow
-  District Boundary

Activating the River's Edge

A key component of the plan is connecting people and neighborhoods to one another and the river, economically, socially, and physically. The plan aims to acknowledge the riverfront's industrial past and present, as the site is still an active industrial edge that can serve new economies.

The plan also seeks to advance regional efforts by the local governments and nonprofit organizations to connect people, parks, recreation and commercial interests to the site's existing industrial edge at the riverfront.



South Shore Riverfront Park at South Side Works

The Water Steps at North Shore Riverfront Park

Riverfront Industry along the Almono Waterfront



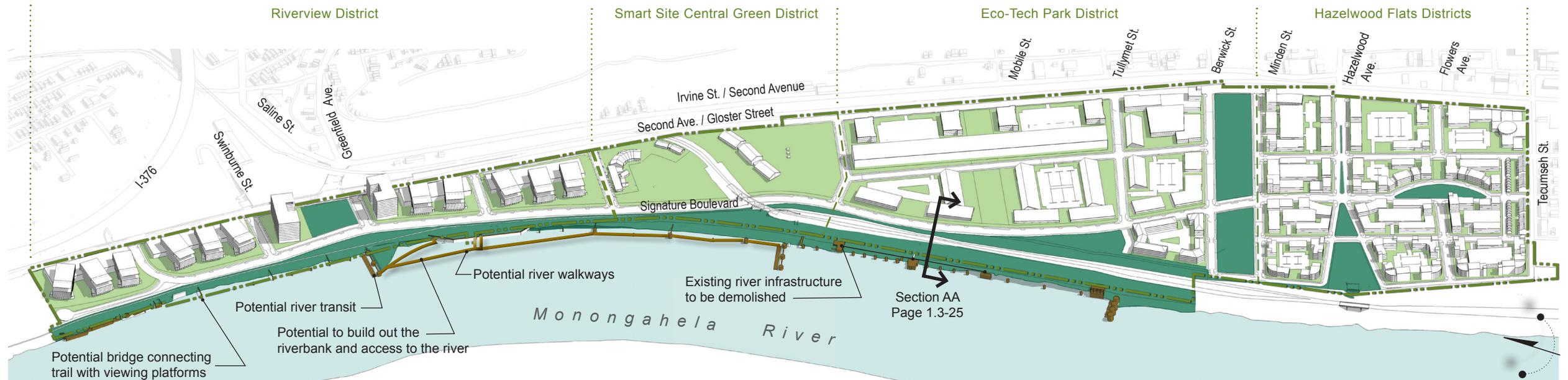
Riverfront Places

This plan's intent is to foster the creation of meaningful places along the water's edge. The final outcome will be shaped by the desire, resources, and knowledge acquired over the last two decades of riverfront development. The following ideas are meant to inspire efforts and collaboration that lead, over time, to a reconnected riverfront.

(A) Stormwater Management The future conditions will be shaped by the manner in which regional stormwater management imperatives are pursued. The site's configuration allows for future daylighting of Four Mile Run, improved access to the water's edge, and

connection to the underground tunnel stormwater retention facility currently envisioned by Alcosan. **(B) A Natural Attraction** The potential renovated pumphouse could become a destination that integrates art, activity, and food to attract visitors to the river's edge. **(C) Take Me to the River** Potential river-level "events" could activate the waterfront and promote interaction with the "riverlife."

The destination points along Almono's shoreline will be connected by a riverfront park and trail network. The natural infrastructure and improved ecology of various shoreline conditions will help manage and improve the quality and flow of stormwater while attracting people to the riverfront.



- Common Open Space
- Parcel Open Space
- Almono Site Property Line
- District Boundary

Current River Edge Conditions

Existing physical conditions at the Monongahela River's edge create riverfront design constraints, such as pedestrian access and visual connections with the river. Current river edge conditions at site fall into three categories.

- Ⓐ **Existing Retaining Wall** Pedestrian access is limited where existing retaining walls separate the landscape at the river's edge from the water, and connection to the river is created visually. The structural and aesthetic integrity of these retaining walls must be considered as development at the river's edge is planned and constructed.

- Ⓑ **Steep Slope to River** Areas with a significant slope to the water's edge limit pedestrian access to the riverfront. However, these locations become opportunities to maximize views to the river and across it to the opposite shore from the site.

- Ⓒ **Gradual Slope to River** Potential water access and recreation is most feasible where there is a gradual slope to the water's edge.

Areas of the site that have existing retaining walls or steep slopes to the waterfront have been planned to

be districts where visual connection to the river has the most impact, such as commercial, industrial, or high-density mixed-use residential areas. These districts include the Riverview, Smart Site Central Green, and the Eco-Tech Park Districts.

Hazelwood Flats is situated where a gradual slope to the river exists. This district is intended as a mixed-use residential district. It is anticipated that, dependent on land interests, development will occur to enable residents and visitors to utilize the natural topography to physically access the river for recreational purposes.



A: Existing Retaining Wall Current River Edge Condition

B: Steep Slope to River Current River Edge Condition

C: Gradual Slope to River Current River Edge Condition



A Working Riverfront

The intent of the riverfront overlay development district is to utilize the site's riverfront infrastructure as an amenity for adjacent industrial, recreational, and research and development opportunities.

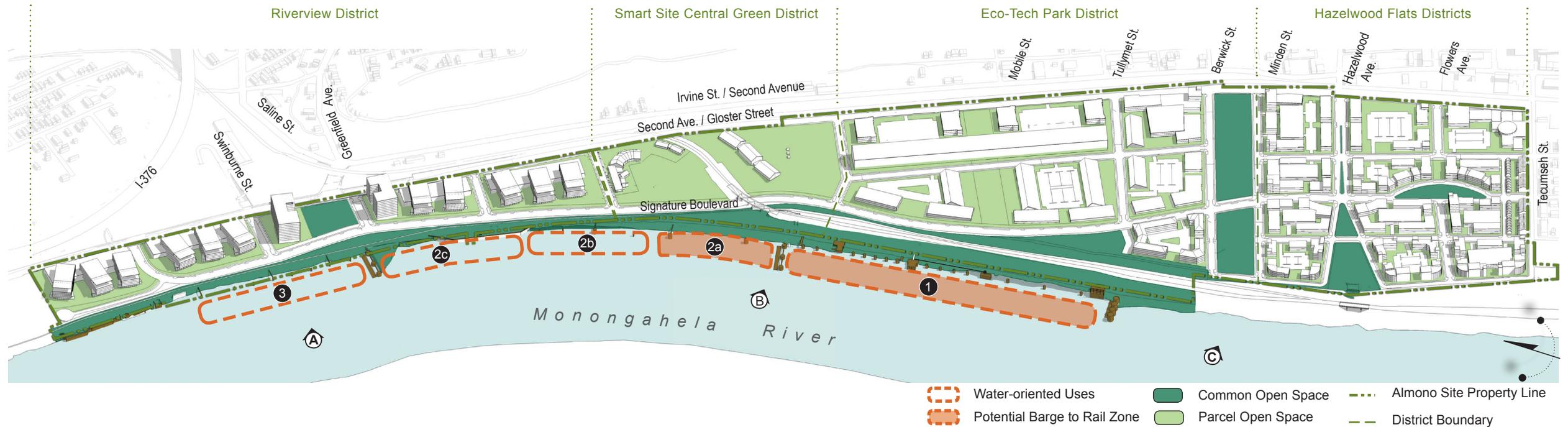
The riverfront can be broken down into three distinct zones based on physical conditions and infrastructure amenities.

Defining the zones are three icebreakers, identified by number on the diagram below, that project into the river perpendicular to the site. These icebreakers are presently used for the staging of barges. It is anticipated that this use will continue with the potential to transfer materials from barge to rail. For specific information on the uses, see Section 2.3 of this document.

Zones 1 and 2a Development in these zones may take advantage of the infrastructure for the staging of

barges. The proximity to potential industrial uses, available in and between the rail line and the rail infrastructure, may be an advantage for barge-to-rail transfer that is copacetic with the surrounding uses.

Zones 2b, 2c, and 3 These zones are anticipated to continue their use for the staging of barges. With the narrowness of the site and the connection of buildings to the river's edge, this area is unlikely to contain industrial uses.



TRANSPORTATION CONTEXT

On Site Connections to Existing and Planned Systems

The Almono site is served by, or is in close proximity to, multiple transportation systems. These include both short line and national rail lines, interstate highways, state routes, neighborhood streets, and regional trails. The complex and interconnecting transportation systems have been integrated into the planning to form a network of connections around and through the Almono site and the Hazelwood peninsula.

The intent of the Almono transportation plan is to provide connections to the surrounding network of streets and trails, improve off-site intersections to accommodate

increased activity, and to provide space along corridors to accommodate regional imperatives identified through long-range planning efforts.

The subsequent diagrams illustrate the manner in which the on-site transportation network aligns with long range regional and City imperatives. These include:

Dedicated Corridor Transit reflects the City of Pittsburgh's goals to provide transit in a dedicated rights-of-way network that connects with Downtown, Oakland, and the Mon-Valley.

Road Based Transportation identifies ways in which current bus routes may be extended to serve the Almono site and better serve the surrounding neighborhoods.

The Existing Street Network connects onto the site at each possible location.

Trails focus on connecting the current network to the riverfront. These allow for the connection to Downtown, Schenley Park, Oakland, the Hazelwood greenway, and the Steel Heritage river trail to the Mon-Valley.



Second Avenue access onto the Almono Site at Greenfield Avenue



View of site from Greenfield Avenue



View toward Hazelwood Avenue from site.

DEDICATED CORRIDOR TRANSPORTATION



Existing freight rail and potential rapid transit

The intent of the Almono site is to connect with existing road-based transportation corridors, while providing for future development of fixed-corridor transit. The development of dedicated corridor transit presumably on historic or existing rail corridors, is not the responsibility of Almono LP but is allowed for as follows:

- A Existing Rail Line** runs along historic Second Avenue and continues through Junction Hollow and into Oakland.
- B Regional Rail Line** runs through Junction Hollow,

through the S-turn, across the Almono site and along the river's edge on an elevated berm to the Glenwood rail.

- C "Mon Con" Line** provides service to Metal Tech, and industrial use north of Pittsburgh Technology Center. All existing rail infrastructure is accommodated to remain.
- D Eliza Furnace Trail** presently terminates at Swinburne St and runs downtown as a trail.

investment. The Almono plan encourages transit-oriented, high-density development to further warrant establishment of dedicated-corridor transit connecting to Downtown and Oakland. It is anticipated that transit would align with the existing Eliza Furnace Trail corridor, making the riverfront being developed as the preferred trail location to Downtown.

- T** Almono LP has identified two locations for transit stops. One will serve the high density mixed use Riverview district, and the other will serve the residential portion of the site and surrounding neighborhood in Hazelwood.

Planning for Dedicated-Corridor Transit requires a density of people, goods, and services to warrant the



NOTE: Almono LP is not responsible for regionally driven transportation improvements. Such improvements fall under the purview of the City of Pittsburgh, and regional and state stakeholders, agencies, and authorities.

ROAD-BASED TRANSPORTATION

Road-Based Transit and Higher-Volume Network

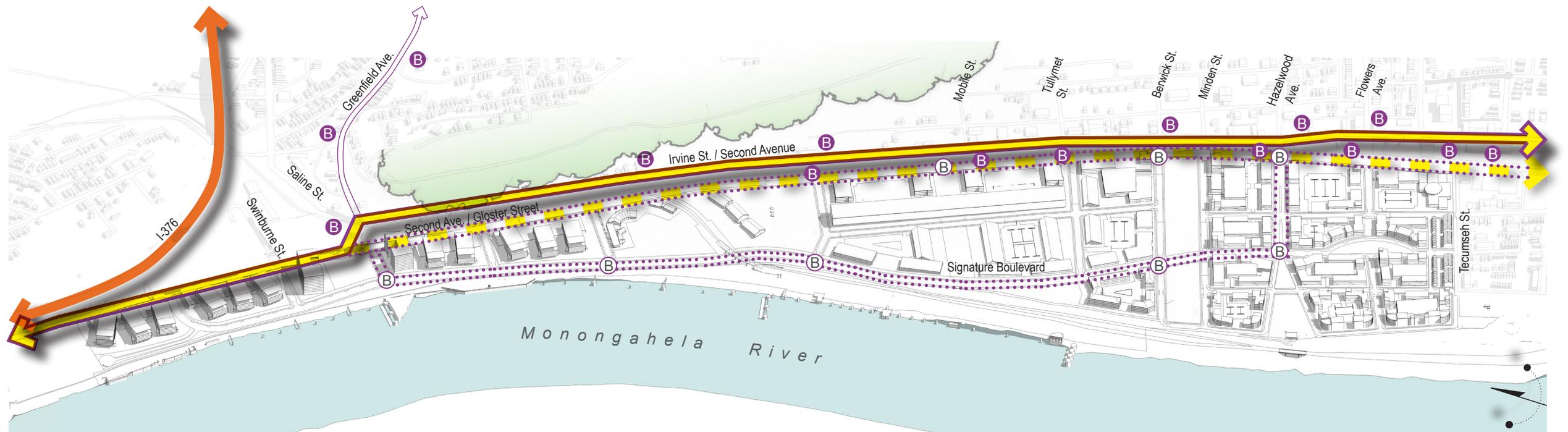
The intent of the Almono development plan is to expand the existing road based transportation network through full connection with the on-site road network.

The potential bus routes depicted below are for diagrammatic purposes only. Actual bus routes will be planned and developed in coordination with the City of Pittsburgh, Port Authority of Allegheny County, PennDOT, and other regional transportation agencies and authorities.

Existing Road-Based Transit and High Volume Systems utilize both city streets, state routes, and interstate highways that serve private vehicular traffic. This road network can be congested, so road-based transit systems do not offer improved service over private vehicles. Bus service from Hazelwood and Greenfield is infrequent.

Road-base and High-Volume Road Transit through the site is accommodated by a series of parallel routes to allow for redundancy, phased construction, and

continued corridor improvements both on- and off-site. Almono LP supports the emergence of a multi-modal transportation network that will increase access to and from the Almono site over time. The development plan allows for increased volume on the Second Avenue/ Gloster Street alignment on the river side of the railroad lines. This alignment provides for higher volumes if this becomes a regional imperative, or to accommodate continued qualitative improvements to the Irvine Street/ Second Avenue neighborhood corridor through Hazelwood.



- Highway
- Existing State Route
- Existing Bus Route
- B Existing Bus Stop
- Almono Site Property Line
- Potential Roadway
- Potential Bus Route
- B Potential Bus Stop
- District Boundary



Align and Connect the Street Network

The intent of Almono LP is to connect the proposed street grid on the Almono site to the adjacent neighborhood streets everywhere that existing grade and railroad access permit. Movement across the site is facilitated by aligning the "Signature Boulevard" with Blair Road and continuing historic Second Avenue along the river side of the railroad.

Riverview establishes a network of connections between Second Avenue and the Signature Boulevard. Block sizes are intended create walkable connections between these blocks similar to a downtown district.

Smart Site Central Green is defined by the railroad S-curve that includes a surface crossing on Second Avenue and a passage underneath the rail at the "Signature Boulevard." Should higher volumes along Second Avenue become a regional imperative, surface railroad crossings may need to be addressed.

Eco-Tech Park includes larger blocks to allow for a variety of industrial uses. The internal neighborhood streets in this area may vary from what is shown based on need for access, security, and logistics, and development proposals.

Hazelwood Flats connects to the neighborhood street grid. Where physical connections are not feasible due to the railroad, view corridors may be established by aligning new neighborhood streets with streets across the tracks. The density of the street grid in this area reflects that of the surrounding residential community in order to restore the "fourth quadrant" of Hazelwood.

As regional imperatives for transit, trails, stormwater, and parks emerge, the plan anticipates a "grid" connection with Swinburne and Greenfield Avenues which will connect Oakland, Greenfield, and Schenley Park to the river (see page 1.3.- 44).



BICYCLE INFRASTRUCTURE

The intent of the Almono site is to provide a comprehensive cycling plan that encourages bicycle access throughout the site, supports alternative transportation, and promotes healthy lifestyles. Strategies include: cycle tracks, bike lanes, shared lanes, and parking infrastructure.

Separated Cycle Tracks

Physically separated from automobile traffic and pedestrian-oriented sidewalks and trails, cycle tracks are primarily intended for bicycle traffic and other non-motorized wheeled transportation (scooters, roller blades, skateboards, etc.)

By separating cyclist traffic from automobile traffic, cycle tracks provide a higher-level of physical security than on-street bike lanes and are more desirable for active high-use trails to avoid conflicts between pedestrians and higher-speed bikes.

On-Street Bike Lanes

Bike lanes enable cyclists the opportunity to ride at their preferred travel speed while visually reminding motorists of shared streets. Designated bike lanes will be provided on key primary streets.

Shared Lanes / Sharrows

Sharrows are proposed for neighborhood-level streets where traffic speeds are lower and the speed difference between automobile and cyclist is low.

Bicycle Parking

Bike racks and on-street corrals contribute a composed and orderly public realm while providing both short-term and long-term parking. Bike corrals should be located in proximity to neighborhood activity centers and amenities.



- ● ● Existing Shared Use Trail
- 🚲 Proposed Bike Corral Location
- ● ● Proposed Shared Use Trail
- Proposed Cycle Track
- Almono Site Property Line
- Existing Shared Lane
- Proposed Shared Lane
- Proposed Dedicated Bike Lane
- District Boundary

PEDESTRIAN NETWORK



Almono's pedestrian network provides a circulation network that includes sidewalks and the river trail. With multiple points of connection, pedestrians can move between the "complete streets" network and the trails which connect the site to the larger regional trail network.

Complete Streets

Designated rights-of-way are designed as complete streets with dedicated bike lanes or cycle tracks, street trees, sidewalks with pedestrian amenities,

and placemaking features to provide continued visual interest. The complete streets are focused connecting key points of the site to the surrounding neighborhoods and destinations.

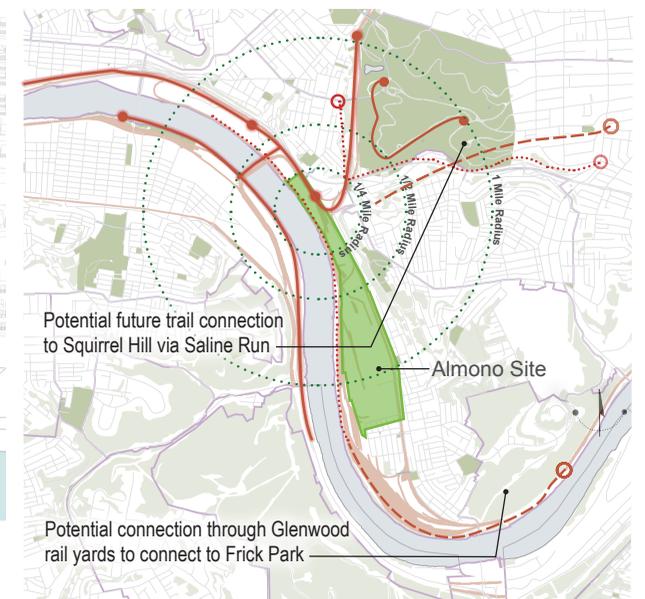
Trails

The Hazelwood Heritage trail is the continuity of the Three River's Heritage trail to the site. Located along the river, this trail connects to the regional systems through adjacent trail networks, trailhead "places," and a series of complete streets. This would allow for

connection to Schenley Park via the riverfront trail at Four Mile Run. Should regional trail advocates advance off-site trails around the Glenwood rail yard, the site will connect Frick Park and Nine Mile Run.

Trail Heads

Trail heads are located at connection points between the street network and the trail to maximize connection and movement between systems.



- Existing Trail
- Potential Trail
- Existing Trail Head
- Potential Connection/ Trail Head
- Proposed Trail
- Almono Site Property Line
- Proposed Complete Street
- District Boundary

TRANSPORTATION STUDY

Connecting the Site

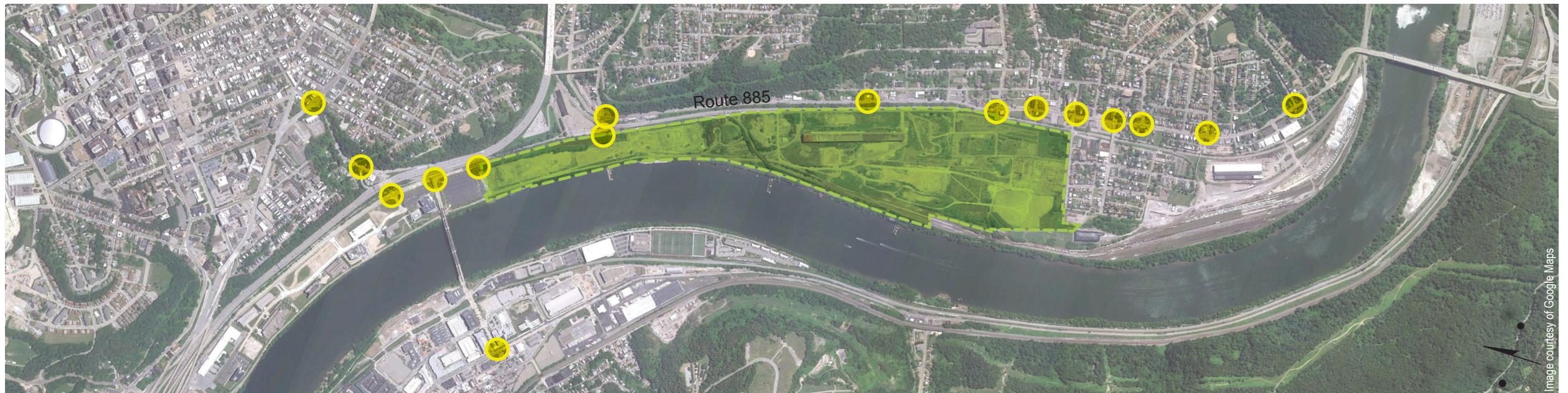
A development on the scale of the Almono site requires study and coordination between the on-site network and the existing transportation infrastructure off-site. Due to the site's location and adjacency to state Route 885, this coordination involves both the City of Pittsburgh and Pennsylvania Department of Transportation (PennDOT).

The team was asked to prepare two studies, one that focused on the initial phase vehicular traffic and another that studied conditions at the full build out of the master plan.

The **Initial Phase Transportation Study** was prepared per PennDOT guidelines and coordinated with City Transportation Planners. The transportation study evaluates the existing vehicular traffic conditions, studies the impact of development for the initial phase of construction, and proposes significant off-site mitigation where necessary to maintain or improve the

existing levels of service for motor vehicles. This report has been submitted to and reviewed by both PennDOT and City Planning. The following pages will describe the process and findings generally.

The intent of the **Master Plan Transportation Study**, per City Planning request, was to provide data on anticipated traffic volumes and to establish a dialog for regional planning of potential future regional transportation solutions, including the prospect for different modes of transportation.



In dialog with City Planning and PennDOT, a Form B scoping document was established to identify the off-site intersections that would be included in the transportation study. The figure above indicates the off-site study intersections.

Study Intersections
 Almono Site Property Line

TRANSPORTATION



Existing Conditions

As the basis for both the Initial Phase Transportation Study and the Master Plan Transportation study, the existing traffic conditions, prior to development on the Almono site, were monitored and documented.

Capacity calculations were performed for each of the existing study intersections using existing traffic volumes and conditions at the study intersections during the weekday AM and PM peak hours. The team then applied the methodologies published in the

Highway Capacity Manual 2000 to determine how well an intersection, an approach, or a movement at an intersection operates. It then assigns to it a Level of Service (LOS) A through F, with LOS A representing the best operating conditions and LOS F, the worst.

The results of the overall intersection capacity calculations performed are presented in the figures below. The existing conditions analysis results show problematic delay and congestion conditions at multiple

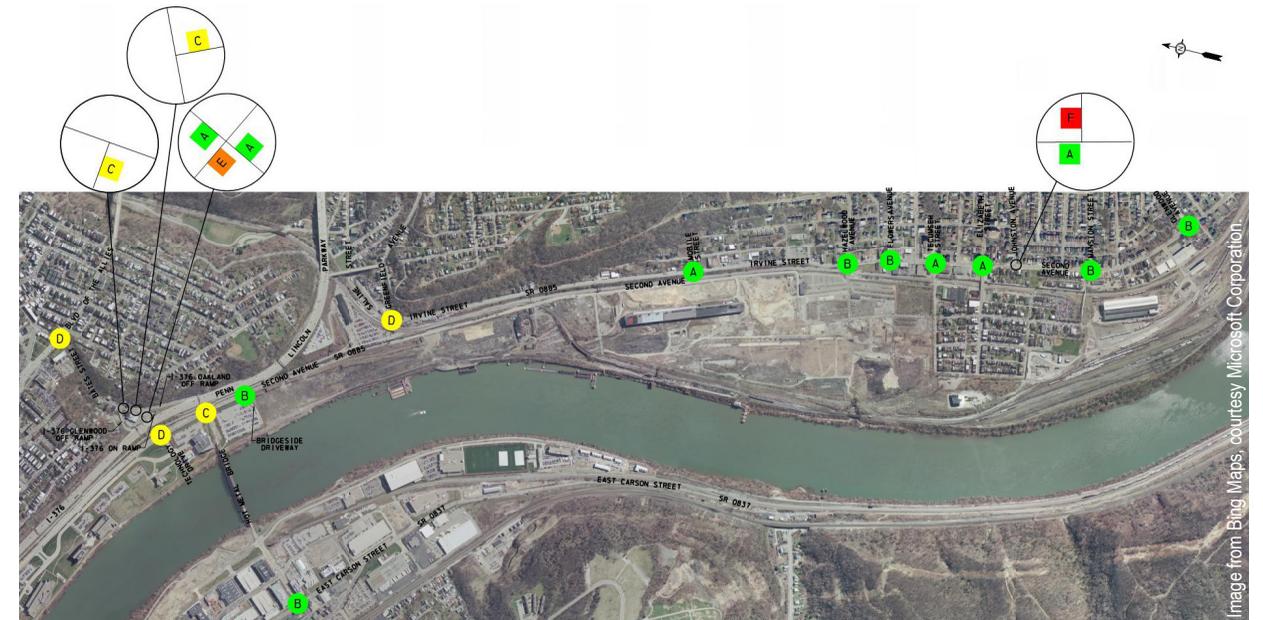
locations within the existing study area. Most of the delay problems occur along Second Avenue between Bates Street and Greenfield Avenue, inclusive.

This represents congestion and delay related to weekday commuter traffic and is indicative of regional transportation problems related to commuter traffic traveling to and from the central business district and Oakland.

AM Peak Conditions



PM Peak Conditions



- ● Minimal control delay, favorable progression
- ● Moderate control delay, ineffective progression
- ● Significant control delay, unfavorable progression
- ● High control delay or over capacity, extensive queuing

INITIAL PHASE TRANSPORTATION STUDY

Initial Phase, Five Year Planning

The scope of work for the transportation study, as defined by PennDOT, is focused on the initial phase of development anticipated in the first five years. The development team outlined an initial phase that represented a variety of uses across the site.

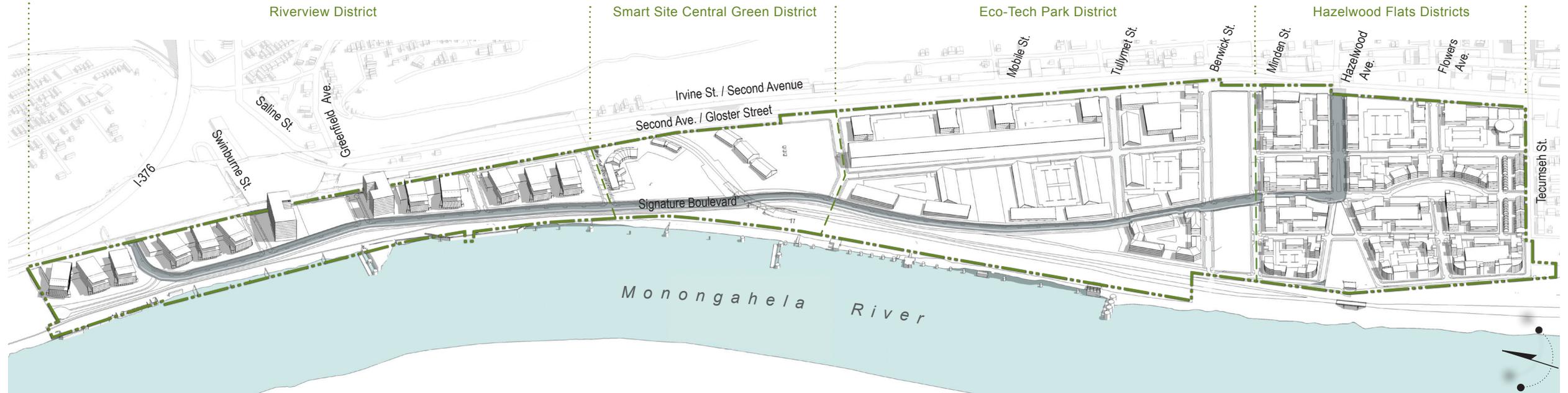
Vehicular trip generation for this proposed initial phase was projected based upon data published by the Institute of Transportation Engineers (ITE) in their Trip

Generation, Eighth Edition, 2008. Utilizing data from Southwestern Pennsylvania Commission (SPC), the team projected additional background traffic growth for the years 2017 and 2022.

Together, the on-site trips and the off-site background traffic was incorporated into the transportation model to establish future weekday AM and PM Levels of Service at the study intersections for 2017.

The same process was also performed to project the Level of Service for intersections in the design year, 2022. Using PennDOT policy, a 6% reduction in trips was applied to office and residential components to account for modal choice.

The map below indicates the initial phase of development anticipated for transportation planning and vehicular trip generation purposes.



- Phase I Rights-of-Way Framework
- District Boundary
- Almono Site Property Line



Potential Mitigation

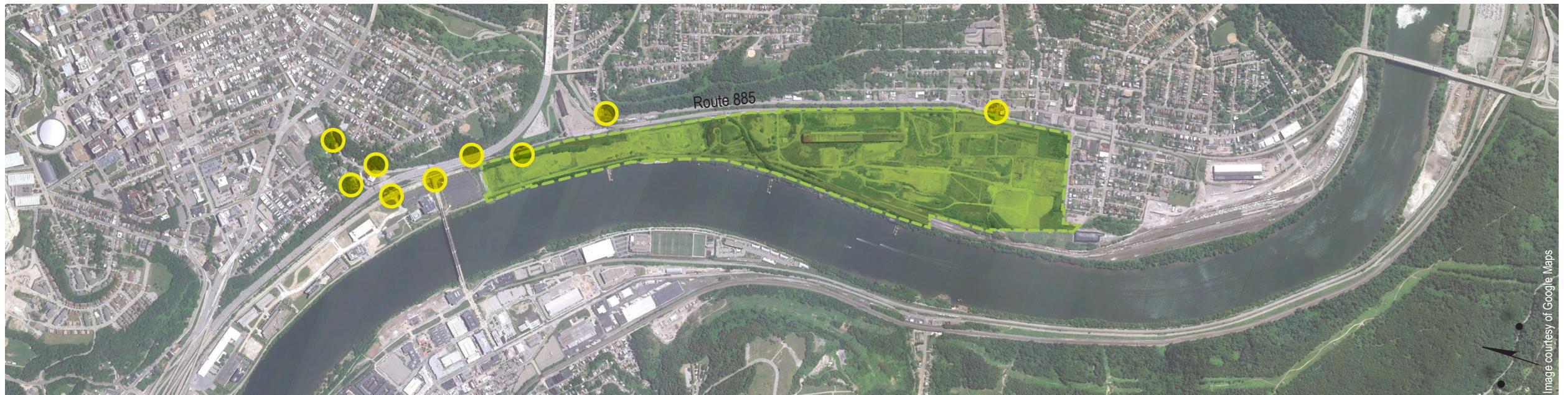
The development team has worked closely with PennDOT and the City Departments to identify the need for a series of roadway improvements in the vicinity of the site. The improvements can be implemented to provide immediate relief to existing congestion and to permit the progression of the development anticipated in the initial phase.

Improvements range from improved and coordinated signals to the incorporation of turn lanes where feasible. It is anticipated that the development team will work with the City and State to establish an appropriate timeline for public engagement and the design process, as well as sequence for the improvements.

The map below identifies intersections for potential mitigation during the initial phase. Additional information

can be found in the Phase 1 Transportation Impact Study, prepared by GAI and Trans Associates, and submitted in March of 2013, as amended.

Off-site improvements will focus on quality of life and the multiple modes of transportation used in our communities with the goal of improving transportation conditions for all people.



● Potential Improved Intersections - - - Almono Site Property Line

MASTER PLAN TRANSPORTATION STUDY

Connecting Communities

The scope of the master plan transportation study, as identified by City of Pittsburgh, was to study the impact of the fully realized master plan, on the intersections previously identified. It is anticipated that the site will be developed over the course of twenty years.

To accomplish this study, data from the Southwestern Pennsylvania Commission was utilized to align projected regional growth and background traffic volumes looking ahead twenty years. It was identified

that the Almono site sits between two regional transportation corridors that connect both the Mon Valley Communities and the East End neighborhoods with Downtown, Oakland, and the South Side.

The transportation model identified significant existing regional transportation system deficiencies and identified opportunities for modifications. Improvements to the regional transportation network, over the next twenty years, will be necessary to welcome growth and

investment in this area of the City, to mitigate projected congestion, and accommodate the full build out of the Almono site.

The study of these potential regional improvements is beyond the scope of the SP District process for this site. Almono LP will collaborate with the City of Pittsburgh, the Department of Public Works, and PennDOT as well as SPC, and other regional stakeholders as the site becomes more densely occupied and these agencies plan for regional improvements.



OFF-SITE REGIONAL IMPROVEMENTS



Potential Multi-Modal Improvements

Through conversations with various stakeholders, a list of potential regional improvements has been developed which are likely to be considered over the life of the Almono project by agencies or parties other than Almono. These improvements could be driven by the City, the County, the State or a combination, including other regional stakeholders such as the SPC or the Port Authority.

It is reasonable to believe that many of these improvements are likely to be implemented through the development cycle of the Almono project and that

these improvements will have a positive impact on the use and development of the site and the surrounding communities.

As important players in guiding growth and change in the City, the Departments of Planning and Public Works are in the best position to provide a considered and unbiased assessment of the collective impacts that these future improvements will have as they relate to the long term evolution of the Almono site and the communities of the "Hazelwood Peninsula".

These items should be studied to counteract development pressures that lead to sprawl, urban disinvestment, and declining regional health. The Almono site's development will be considered by local planning and transportation agencies to address the investments necessary to accommodate regional growth. Focusing more dense growth in this area will result in a more efficient and competitive region supporting a higher quality of life for all.

Potential Multi-Modal Study Area Initiative to Include in a 20-year Area Development Scenario	
Enhance Public Transit	BRT/Transit service on Second Avenue or on Eliza Furnace Trail alignment with stations adjacent to the site.
	Bus routes and stops extended through the site via Second Avenue and the Signature Boulevard
	Additional bus routes to Oakland and South Side
	River taxi service with various stop locations between Downtown and the proposed site.
Bicycle Routes and Pedestrian Connections	Potential on-site connections could include existing or relocated Eliza Furnace, Panther Hollow, and Hazelwood Heritage Trails to proposed on-site trail and roadway network
	Potential off-site trail connections could include Junction Hollow, Upper Hollow, Saline Run, Hazelwood Greenway, Nine Mile Run, Four Mile Run, and Duck Hollow Trails
	ADA compliant sidewalks and crossings throughout the site and along Second Avenue in Hazelwood

Potential Off-site Transportation Improvements to Include in a 20-year Area Development Scenario	
Optimize Swinburne Connection to Oakland	Reconnecting two-lane Swinburne Street to Second Avenue as a primary traffic movement, with turns to and from Frazier Street Bridge as secondary movements
	Potential turn lanes at Second Avenue
Connect Boundary Street to Oakland	Previously studied by others; preferred alignment within railroad right-of-way as an HOV connection to limit access
	Paved connection with possible lighting to carry bicycles and pedestrians or transit
Future Entry or Exit to I-376	Previously studied by others; off ramp near Liberty Bridge ending at "sand pile"
Increasing Bates / Second Avenue Capacity	Widening of Bates Street to four lanes between Boulevard of the Allies and Second Avenue
Continue Second Avenue on the River Side of the tracks to Glenwood Bridge	Phased construction of a parallel route of Second Avenue through Hazelwood
	New intersection with Second Avenue near the Glenwood Bridge

PLANNING FOR REGIONAL IMPROVEMENTS

Increasing Connections

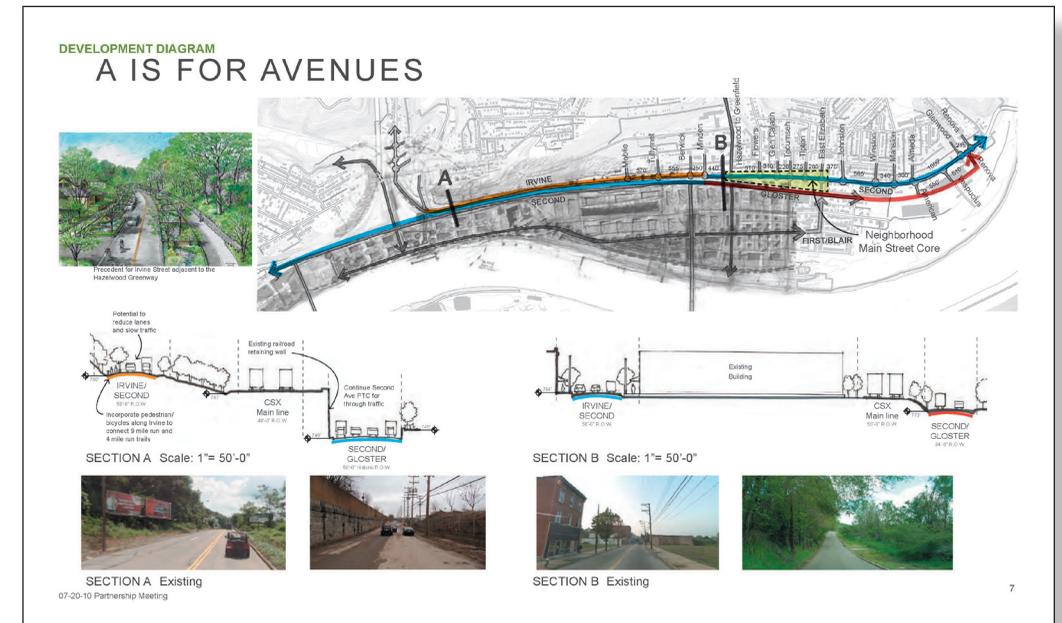
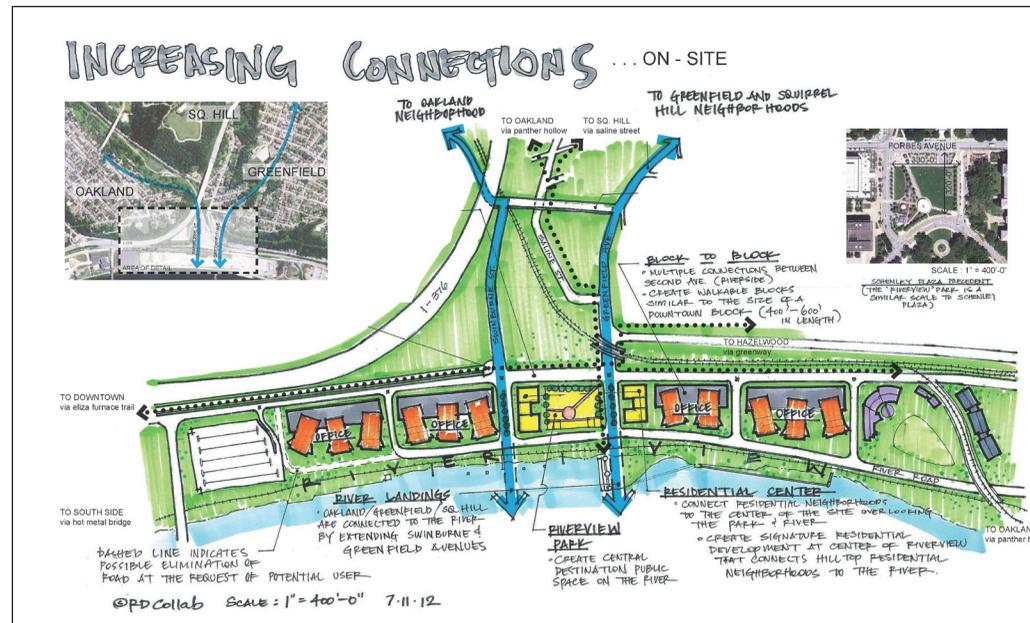
It is recommended that a combination of regional transportation improvements be considered and implemented as the Almono site development advances. In a coordinated effort, Almono LP is pursuing a design approach for each end of the site that will align and connect to several regional improvements if pursued.

This **Network Approach** improves the function of the transportation system by differentiating between transportation and road types providing a network that offers multiple routes to the same destination. The

transportation team established that if any combination of improvements were pursued it would improve movement around the site.

In the **Riverview** end of the site, Almono LP is allowing for multiple street connections at regular intervals. Two strong Avenues aligned with Swinburne and Greenfield Avenue connect Oakland, Greenfield, and Schenley Park to the river. Trail/rail conditions at Junction Hollow provide a strong link to Oakland and the Saline Run Trail connects Squirrel Hill to the river and regional trail network.

Almono LP is planning to restore the historic **Second Avenue** alignment on the river side of the railroad tracks to create a system of parallel avenues seen throughout other City plateau neighborhoods. If pursued the restored Second Avenue alignment could carry the through traffic and connect directly to the Glenwood Bridge. This approach restores Irvine Street as a neighborhood park-like road akin to Beechwood Boulevard, connecting to Hazelwood's main street where retail services can once again flourish.





Evolving Guidelines

Full development of the vision for the Almono site will rely in part upon the revision of policy and impact assessment guidelines at levels that include City, County, Regional, and State government. Opportunities also exist for the development of data-driven decision-making approaches that relate the ESP Framework and PLANPGH Goals to future phases of development and regional infrastructure investment.

As public policy evolves to allow for broader system improvements such as regional transit or local circulators, specific limitations of impact assessment guidelines must be addressed. Development is currently modeled under guidelines created and approved by the Pennsylvania

Department of Transportation (PennDOT), due to the State Routes that border the site and the adjacent interchange at Bates Street and Interstate 376.

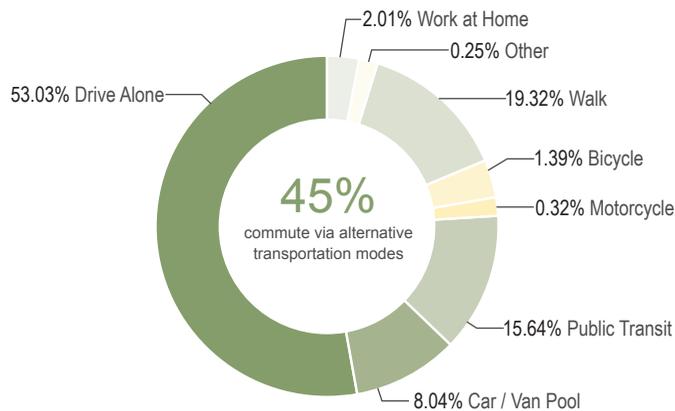
PennDOT has recognized that the guidelines distribute future trips amongst modes in a way that is not indicative of City of Pittsburgh neighborhoods. PennDOT has expressed their willingness to consider alternate Transportation Impact Study guidelines as developed by the City of Pittsburgh. The intent is that new guidelines incorporate a higher reduction of Vehicle Miles Traveled that can be utilized when modeling future phases of development. This will result in an alternative modal split

that reflects greater number of pedestrian, transit and cycling trips than what is currently allowed.

As a **data-driven approach**, the City of Pittsburgh will work to foster relationships between the Almono partnership, universities, professional organizations, public agencies, community stakeholders, private investors, and other researchers to explore how desired and observed outcomes can form new impact guidelines. It is anticipated that the outcome will support the approval of new Transportation Impact Study guidelines. New investment can support evolving local and regional transportation policy as it pertains to public transit and support of other alternative modes.

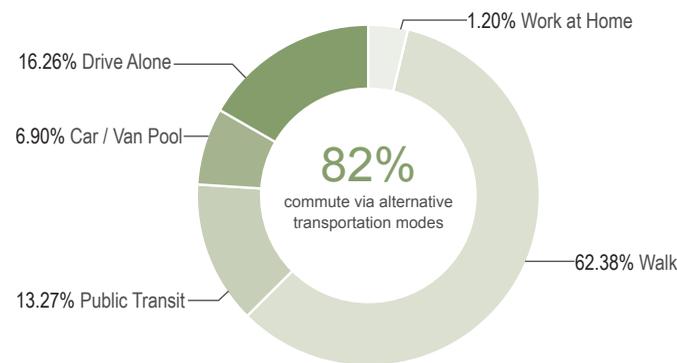
Choice of Commuter Transportation in Surrounding Neighborhoods

South Side Community



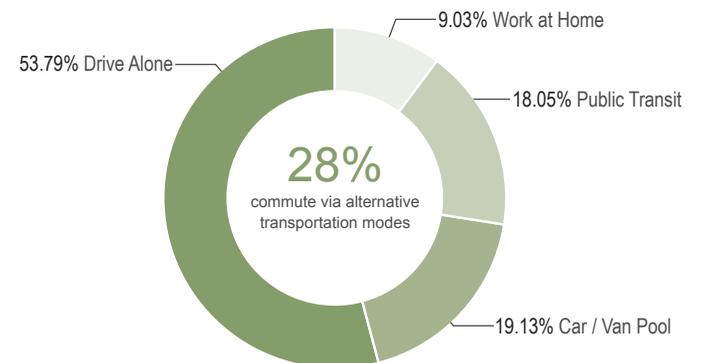
1 icon equals 200 persons
Working Population: 4328
Population: 6597

Central Oakland Community



1 icon equals 200 persons
Working Population: 2509
Population: 6086

Strip District Community



1 icon equals 200 persons
Working Population: 277
Population: 616

NOTE: Data Provided by the Department of City Planning

TRANSPORTATION

Parking Systems

Components of the site-wide parking systems will include *on-street parking*, *off-street surface parking*, *deck parking*, and *structured parking*. Each district will have a unique approach and combination of parking components dependant on final land uses and the development.

All parking shall comply with the location parameters outlined in Section 2.3, Building Development. Parking quantities shall comply with the City of Pittsburgh Zoning Code.

Riverview District

Density in this district is anticipated to warrant structured parking. Shared parking is encouraged due to the anticipated mixture of uses and the desire to activate the site during the day and evening.

Smart Site Central Green

Low density development is anticipated in this district, serviced by small surface lots accessed from Second Avenue.

Eco-Tech Park District

The unique nature of uses anticipated in this district will warrant multiple approaches to parking. Structured or decked parking may serve the mixed-use buildings or the re-purposing of the Mill 19 structure. Industrial properties may rely on shielded surface lots or service yards. A parking demand analysis is anticipated depending upon proposed uses. The goal is to establish appropriate level of parking tied to proposed building occupancies.

Hazelwood Flats District

This district anticipates a combination of surface parking and decked parking. Surface parking under buildings shall not interrupt building uses at the ground floor level along community focused rights of way.



UTILITIES



Utility Network

The initial utility infrastructure will be located within the right-of-ways for the Signature Boulevard and Hazelwood Avenue. These right-of-ways will serve as a utility spine moving across the site, providing access to service for future development.

The development will provide primarily all new utilities. Several existing utility easements are located on site and will remain.

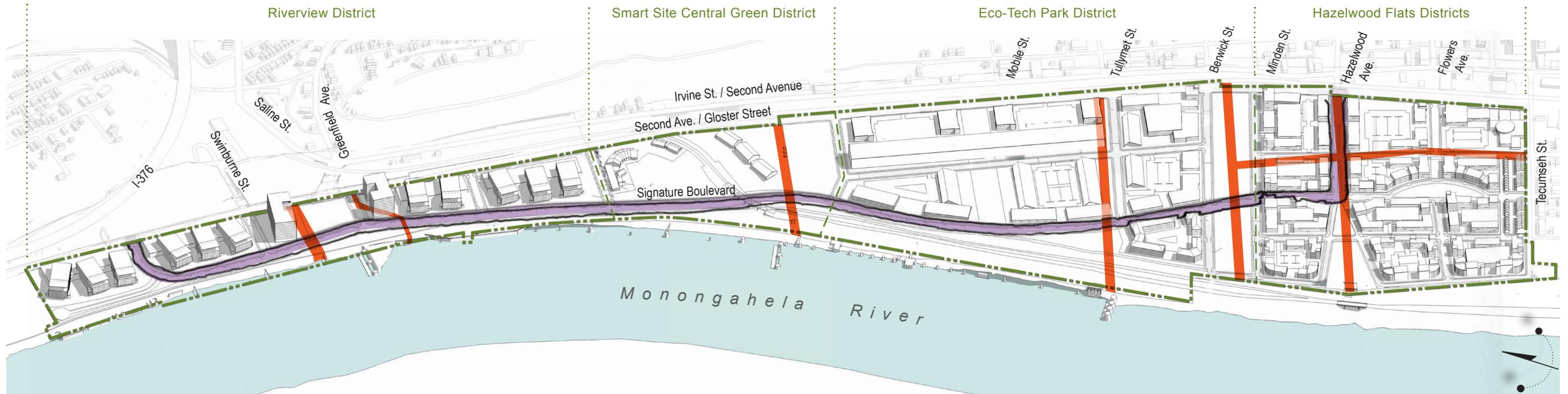
All utilities shall be located below grade within the cartway, including service access and controls. Above grade utility boxes are not permitted.

Public Utilities

Water, storm sewer, and sanitary sewer lines shall be located within the vehicle lanes.

Private Utilities

Electric, gas, and communications lines may be developed in on-street parking lanes to minimize impact on pedestrians and adjacent businesses. Where right-of-way assemblies will be phased, placement of utility lines may be coordinated with anticipated full build out to allow for district energy or other green energy models.



- Utility Spine for Initial Phase
- Current Utility Easements
- Almono Site Property Line
- District Boundary



SECTION 2.1

RIGHTS-OF-WAY

Intent	2.1 - 01
Assemblies	2.1 - 03
Components	2.1 - 15

STREETS FOR EVERYONE

Almono Complete Streets

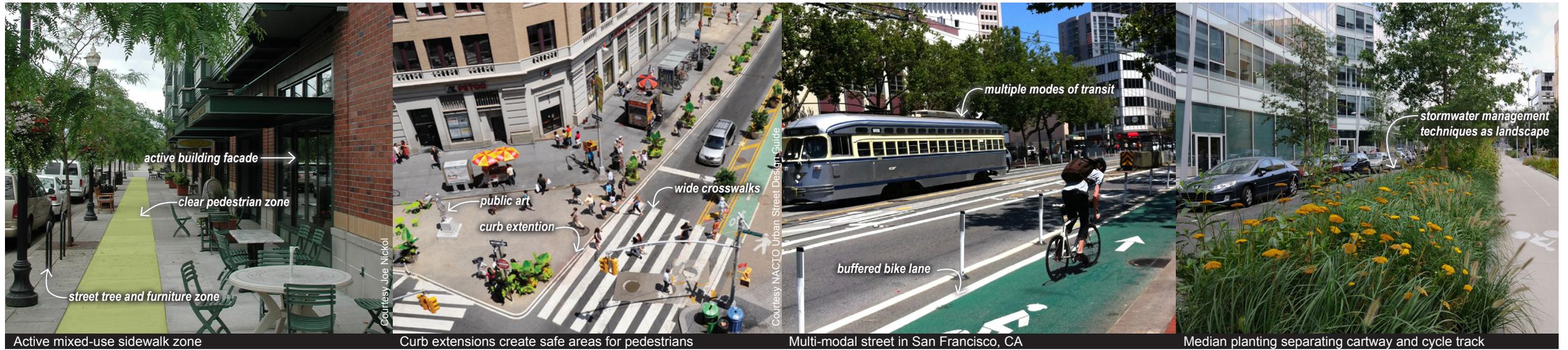
Conventional rights-of-way design typically favors the function of moving automobile traffic as quickly as possible through an area rather than the function of making streets that define character and place.

The rights-of-way in Almono look at streets as a critical component in creating interaction between public space and buildings, promoting social interaction, and establishing street level activity. Motorists, pedestrians, bicyclists, and public transit users should all have the

same fundamental rights of mobility, access, and safety when using Almono streets.

This perspective is encapsulated in the following principles: accommodation to all users; design for safety; pedestrian scaled; appropriate to context, location, and land use; sustainable infrastructure; and definition of the public realm.

These principles define the concept of "complete streets" - where multiple choices in travel modes are provided in a well-connected street network of different hierarchies. Some streets may emphasize regional automobile and truck through traffic, while others may focus on pedestrian-oriented uses. The overall hierarchy of connected streets allow for the provision of multiple modes of travel.



Streets are Public Spaces Successful streets play an important role in not only moving traffic, but in connecting residents and visitors to Almono's public realm and network of open spaces

Design for Safety Safer streets are designed for motorists and pedestrians equally in a proactive approach that reduces and stabilizes speeds to provide a safer environment for all users. Examples include on-street parking, bulb outs, and crosswalks.

Multi-Modal Streets A balanced thoroughfare network that provides equal mobility for bicycle, pedestrian, transit, and motorists.

Low Impact Design Sustainable techniques that approach the mitigation of stormwater runoff at the source through containment and infiltration to reduce the amount of runoff directed into the sewer system

Almono Rights-of Way Types

Almono's rights-of-way network incorporates a context sensitive approach that takes into account the varying land uses, development density, public realm activity, and site access in establishing a hierarchy of street assemblies.

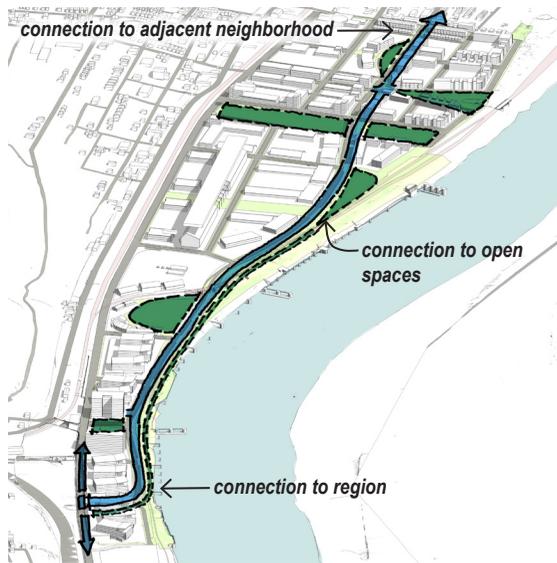
These different hierarchies are intended to convey the importance of the street's role - from a significant boulevard to a local lane - in shaping Almono's public realm. The following types are:

Signature Boulevard is Almono's defining right-of-way: a complete multi-modal street with diverse land uses that connects all Districts externally and internally. Pedestrian infrastructure, automobile lanes, transit and transit infrastructure, bicycle infrastructure, and stormwater management infrastructure are provided.

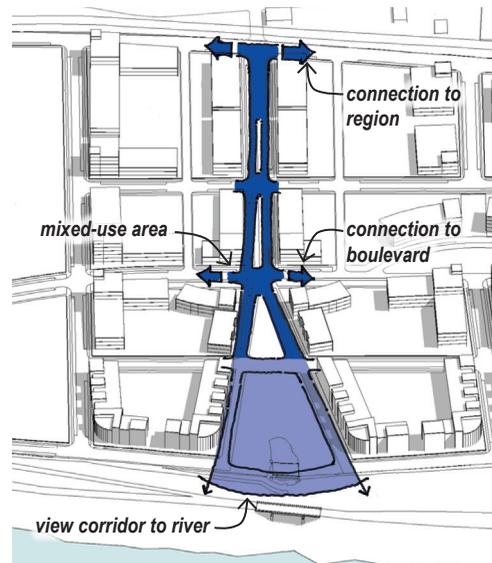
Avenues provide specific Districts access to regional and local vehicle and pedestrian traffic in support of mixed-use, commercial, industrial, or residential uses and services. They serve as interior network connections to the Signature Boulevard.

Neighborhood Streets provide local vehicle and pedestrian access in support of mixed-use, commercial, industrial, or residential uses and services. They serve as interior network connections to Avenues and adjacent neighborhoods.

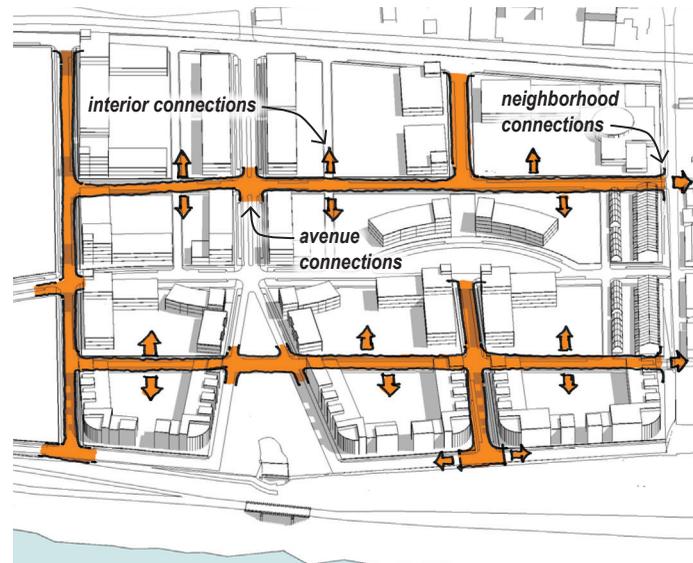
Lanes provide access to riverfront areas and are intended to carry a low volume of one way automobile traffic at low speeds. Lanes are "shared spaces" with a focus on pedestrian and bicycle use and present opportunities for pervious paving systems.



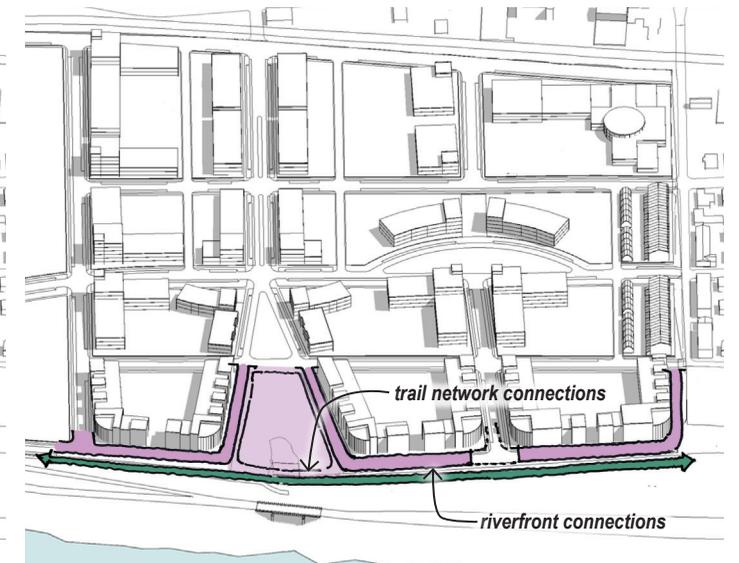
Signature Boulevard



Avenues



Neighborhood Streets



Lanes

RIGHTS-OF-WAY ASSEMBLIES

Almono Rights-of-Way Hierarchy

- Almono's rights-of-way network incorporates a context sensitive approach that takes into account land uses, development density, public realm activity, and site access in establishing a hierarchy of street assemblies.
- (A) **Signature Boulevard** connects all Almono Districts and open spaces through the length of the site and accommodates vehicles, pedestrians, bicyclists, and where possible, a riverfront trail. Place making components include bulb-outs, street furniture, pedestrian scale lighting, bioswales and coordinated place making signage.
 - (B) **Second Avenue / Gloster Street** creates a primary thoroughfare for vehicular, transit, and truck through traffic with amenities for transit stops. Limited pedestrian and bicycle facilities will be provided. The vision for Second Avenue includes a future connection to the Glenwood Bridge.
 - (C) **Hazelwood and Greenfield Avenues** serve as regional connections to Almono's riverfront and open space network, to draw residents, neighbors, and visitors to the river.
 - (D) **Irvine Street / Second Avenue** becomes a complete neighborhood street that provides local traffic to serve adjacent communities. It has the potential for on-street bike lanes to provide access to the trail network to encourage all modes of transport.



- Signature Boulevard
- Neighborhood Street
- Alley
- Almono Site Property Line
- Avenue
- Lanes
- District Boundary

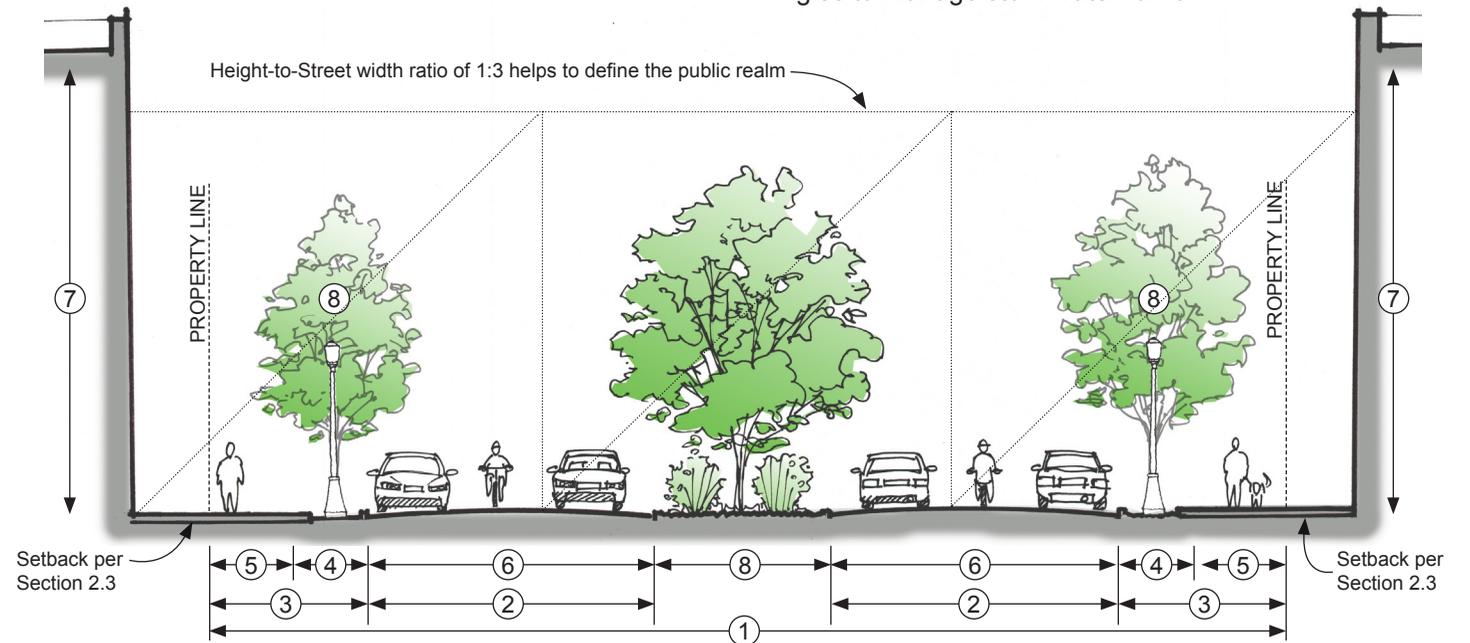
Almono Right-of-Way Assembly Toolkit

The Almono street hierarchies are composed of elements intended to produce context sensitive assemblies that accommodate both traffic and place making.

- ① **Rights-of-Way** the public realm that extends from building frontage to building frontage and includes the street cartway and sidewalk area. A sense of place is created by a spatial enclosure defined by a height-to-street width ratio of 1:3. As a general principle, the tighter the ratio the stronger the sense of place.
- ② **Cartway / Travel Lanes** the travel lanes for automobiles, transit, and on street parking. Refer to Section 1.3 for the Bicycle Infrastructure framework identifying the locations of bicycle tracks, bike lanes, and shared lanes.

- ③ **Public Realm / Sidewalk** the area from the cartway curb to building frontage. Depending on location the sidewalk area may be paved or include landscaping and other design treatments.
- ④ **Street Tree / Furniture Zone** the area of the street assembly for landscape, furnishings, signage, and other design elements that contributes to maintaining a clear pedestrian zone. This zone will also contain above grade utility items including utility lines, light poles, and fire hydrants.
- ⑤ **Pedestrian Zone** the unobstructed area between the building frontage and Street Tree / Furniture Zone that provides a clear walking zone for pedestrians.

- ⑥ **Utilities Zones** extend utilities systems to the districts and individual buildings. Public utilities zones provide for a system or works to provide gas, water, electric, and other services for public consumption. Private utilities zones extend this infrastructure to developments at the parcel level. Utilities zones are placed both below and above ground.
- ⑦ **Building Frontage Zone** the portion of the building Facade adjacent to the Pedestrian Zone that denotes the parcel property line. Refer to Chapter 6, Building Development Standards, for applicable Frontages, Facade Zones, and Setbacks.
- ⑧ **Green Infrastructure Zone** the area free of utilities to allow for the integration of bioretention and other strategies to manage stormwater run-off.

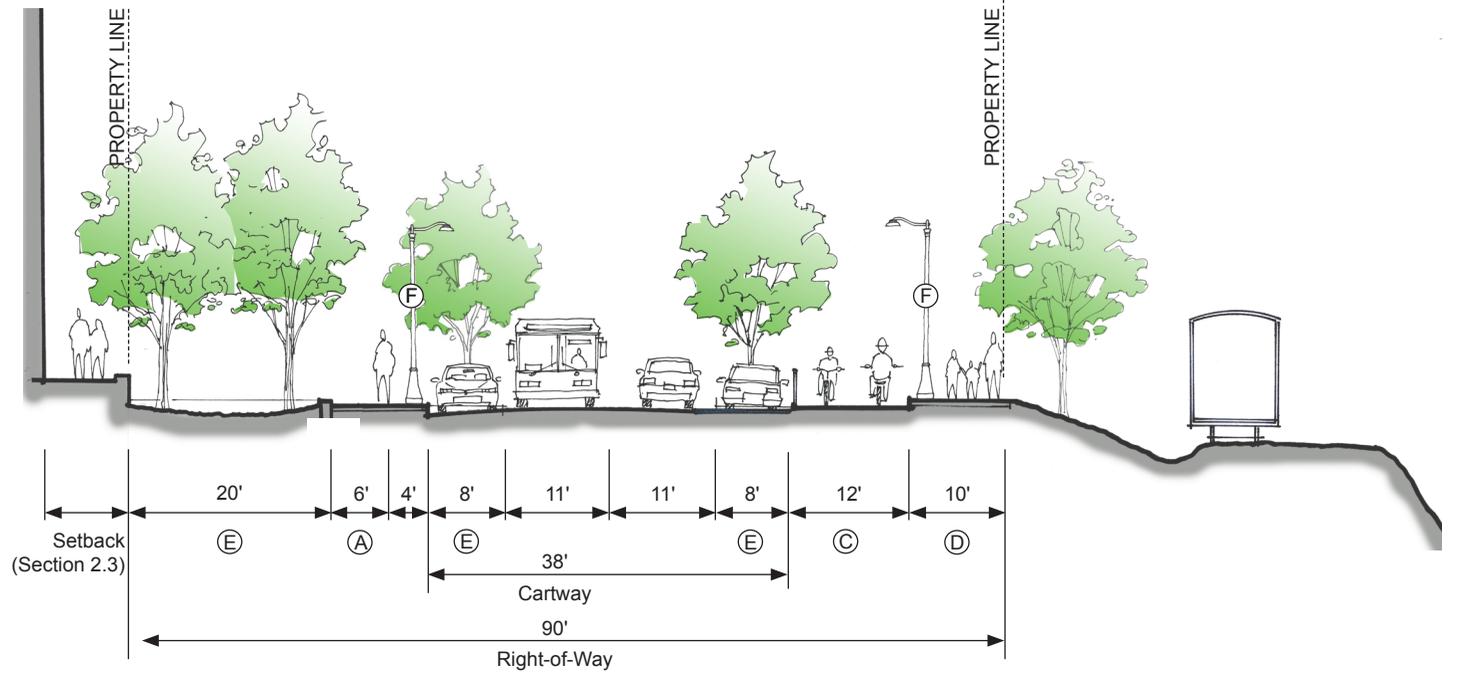


SIGNATURE BOULEVARD

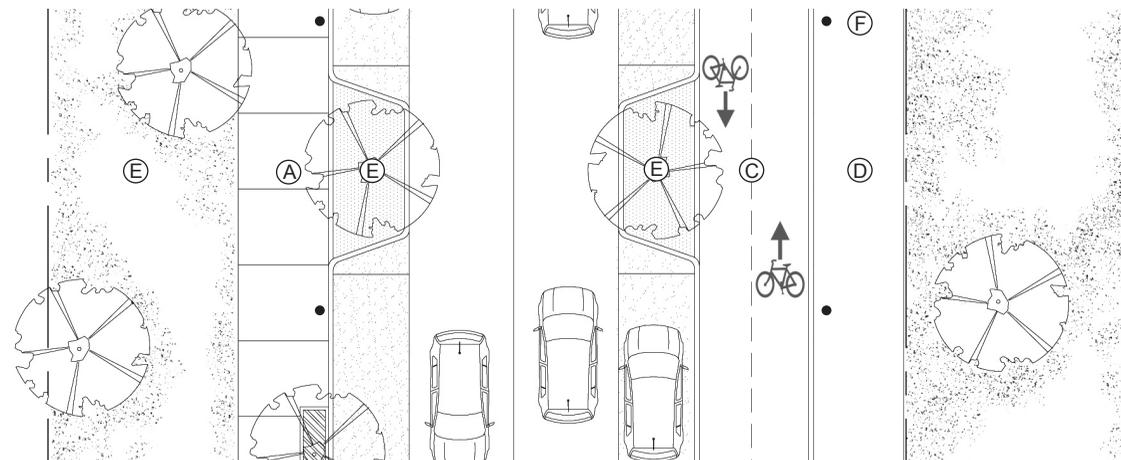
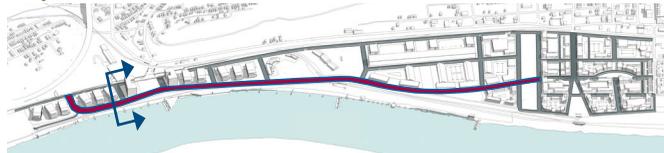
90-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General	
Movement Type	Low
Design Speed	30 mph
A. Sidewalk Zone	
Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	6'
Street Tree / Furniture Zone	4'
B. Intersection and Curb Zone	
Sidewalk planter	Refer to components
C. Bicycle Component	
Buffered Cycle Track	12'
D. Trails Component	
	10'
E. Low Impact Design Component	
Meadow	20'-0"
Parking Lane Bulb outs	8'
F. Site Lighting Component	
Thoroughfare	Refer to components



Key Plan



SIGNATURE BOULEVARD

80-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General

Movement Type	Low
Design Speed	30 mph

A. Sidewalk Zone

Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	9'
Street Tree / Furniture Zone	6'

B. Intersection and Curb Zone

Sidewalk planter	Refer to components
------------------	---------------------

C. Bicycle Component

Bike Lanes	6' per Lane
------------	-------------

D. Trails Component

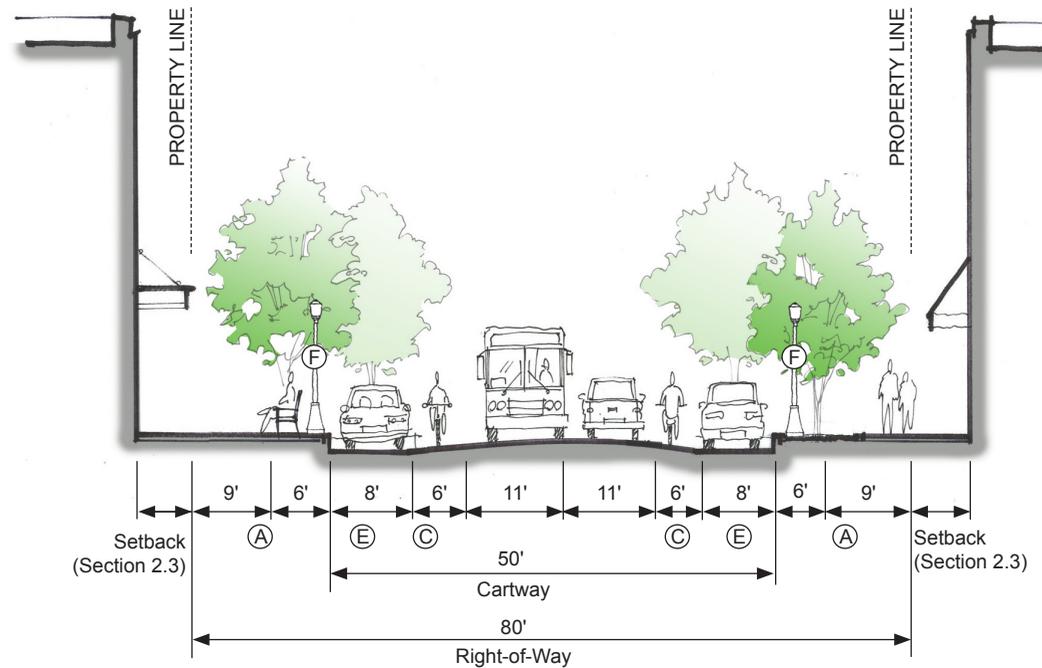
	Not Applicable
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E. Low Impact Design Component

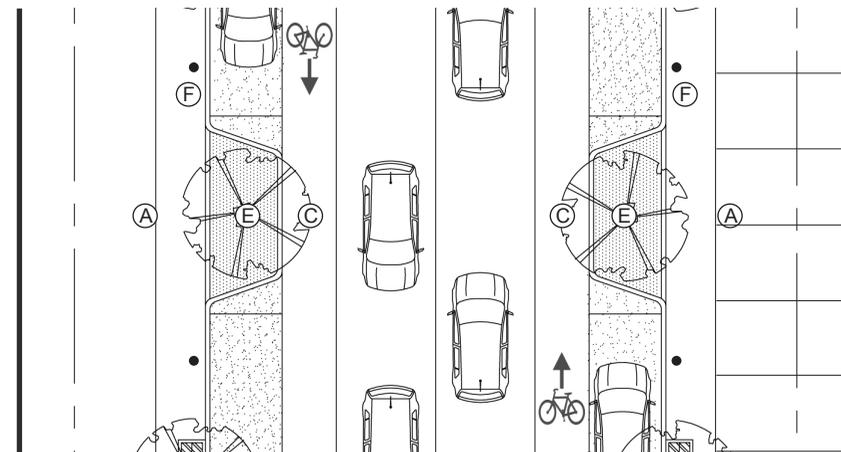
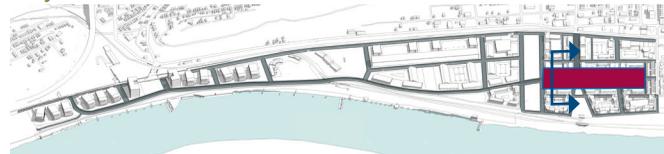
Sidewalk Planter	
Parking Lane Bulb outs	8'

F. Site Lighting Component

Mixed-Use	Refer to components
-----------	---------------------



Key Plan



SECOND AVENUE / GLOSTER

Existing Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General

Movement Type	Existing
Design Speed	Existing

A. Sidewalk Zone

Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	
Street Tree / Furniture Zone	

B. Intersection and Curb Zone

Sidewalk planter	Not Applicable
------------------	----------------

C. Bicycle Component

Bike Lanes	Existing 3 Rivers Heritage Trail
------------	----------------------------------

D. Trails Component

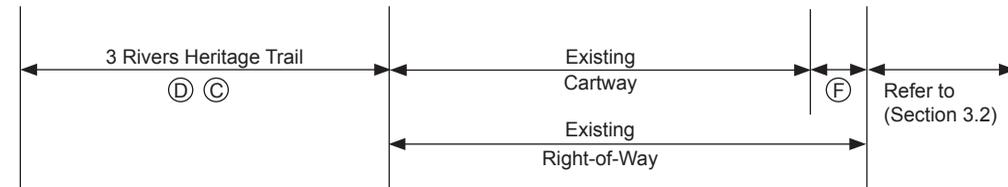
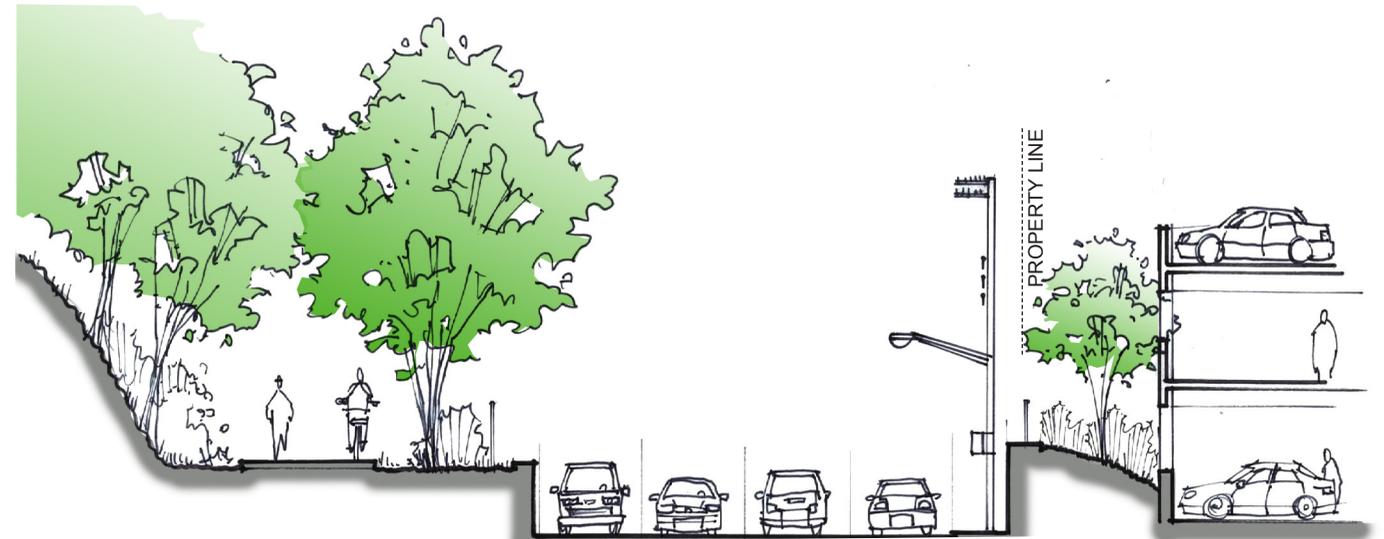
	Existing 3 Rivers Heritage Trail
--	----------------------------------

E. Low Impact Design Component

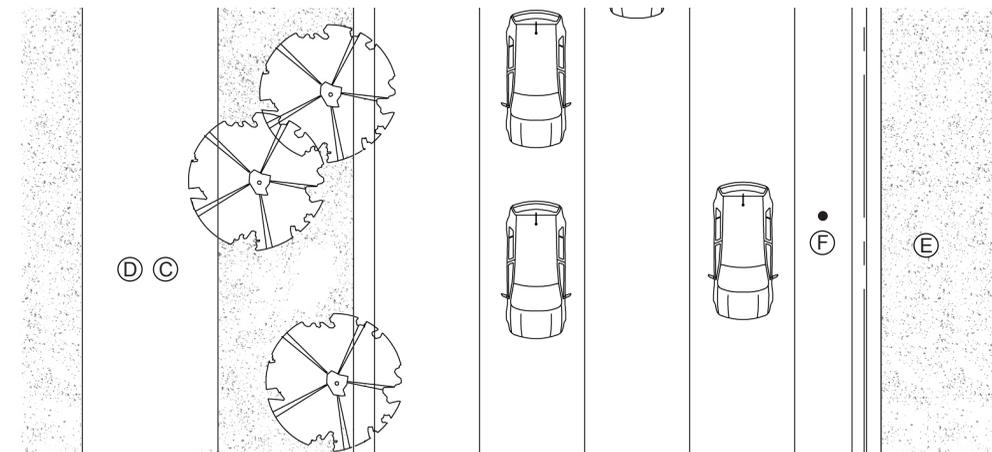
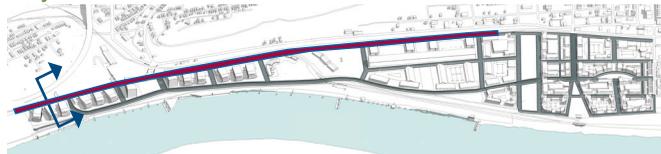
Sidewalk Planter	Refer to components
Parking Lane Bulb outs	Not Applicable

F. Site Lighting Component

Mixed-Use	Refer to components
-----------	---------------------



Key Plan



SECOND AVENUE

70-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General

Movement Type	One Way
Design Speed	

A. Sidewalk Zone

Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	
Street Tree / Furniture Zone	

B. Intersection and Curb Zone

Sidewalk planter	Refer to components
------------------	---------------------

C. Bicycle Component

Bike Lanes	Not Applicable
------------	----------------

D. Trails Component

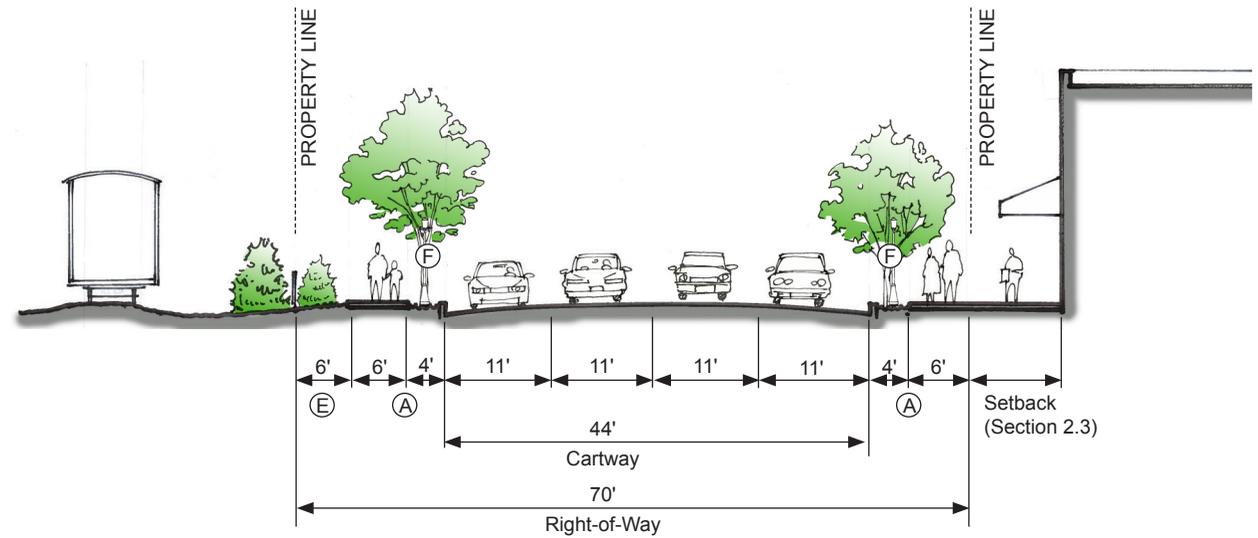
	Not Applicable
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E. Low Impact Design Component

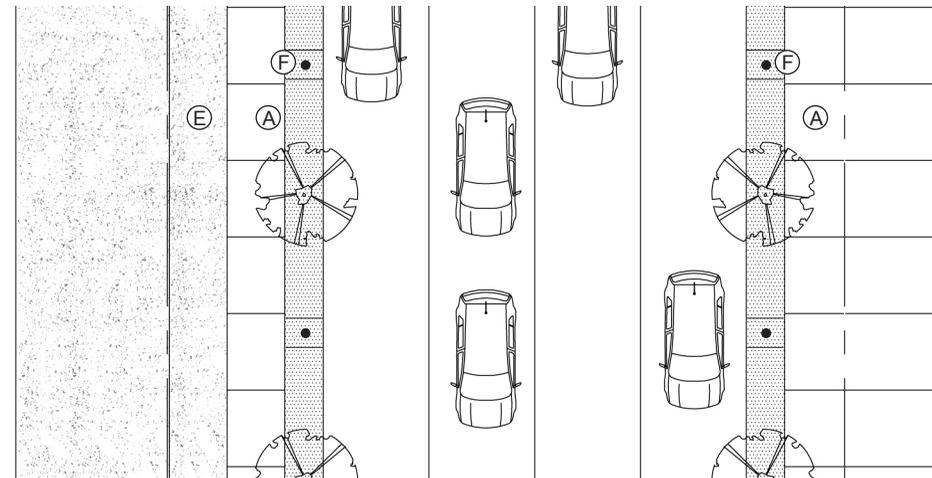
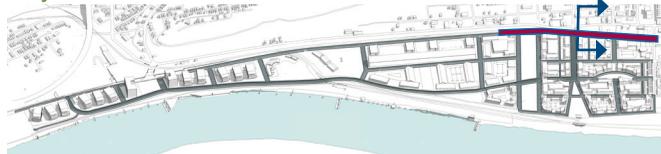
Sidewalk Planter	Refer to components
------------------	---------------------

F. Site Lighting Component

Mixed-Use	Refer to components
-----------	---------------------



Key Plan



HAZELWOOD AVENUE

80-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General

Movement Type	Slow
Design Speed	25 mph

A. Sidewalk Zone

Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	6'
Street Tree / Furniture Zone	4'

B. Intersection and Curb Zone

Sidewalk Planter	Refer to components
------------------	---------------------

C. Bicycle Component

Bike Lanes	6' per Lane
------------	-------------

D. Trails Component

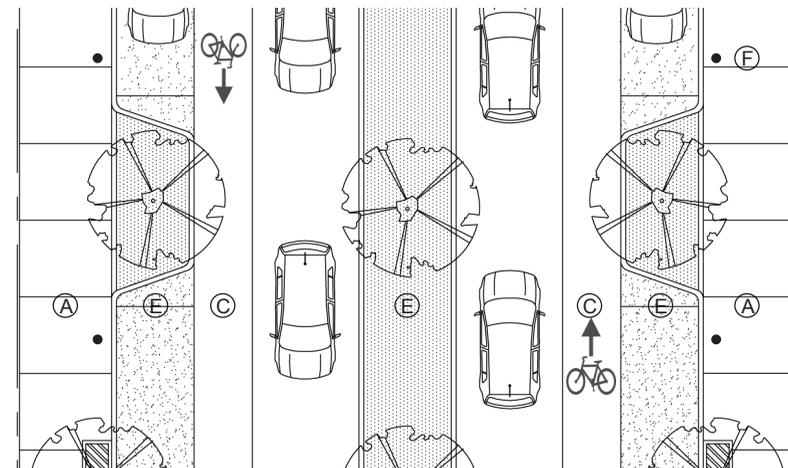
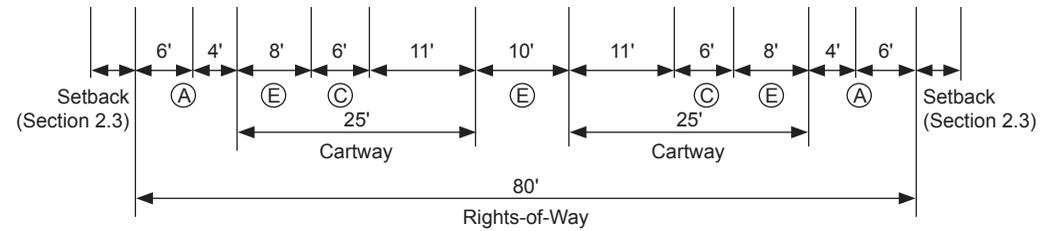
	Not Applicable
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E. Low Impact Design Component

Pervious Parking Lane	8'
Parking Lane Bulb outs	Every fourth space
Median	10'

F. Site Lighting Component

Mixed-Use Area	Refer to components
----------------	---------------------



Key Plan



HAZELWOOD AVENUE

95-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General

Movement Type	Slow
Design Speed	25 mph

A. Sidewalk Zone

Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	6'
Street Tree / Furniture Zone	4'

B. Intersection and Curb Zone

Sidewalk Planter	Refer to components
------------------	---------------------

C. Bicycle Component

Bike Lanes	6' per Lane
------------	-------------

D. Trails Component

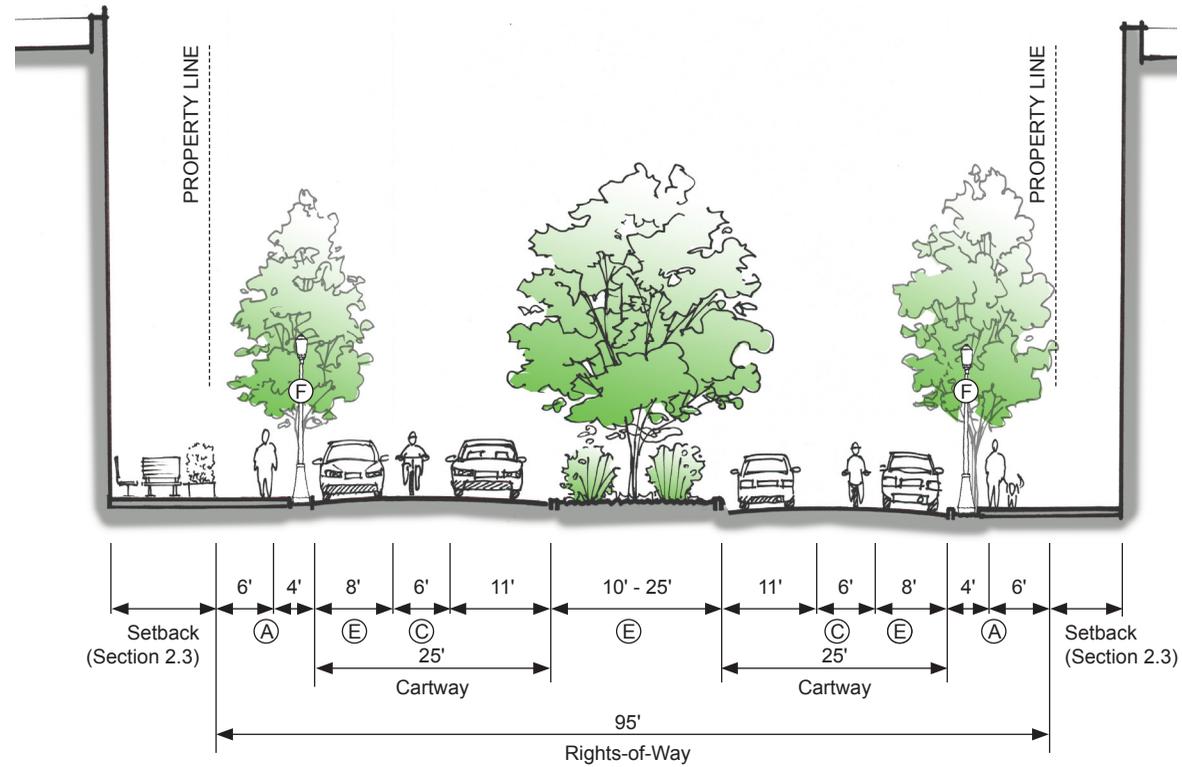
	Not Applicable
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E. Low Impact Design Component

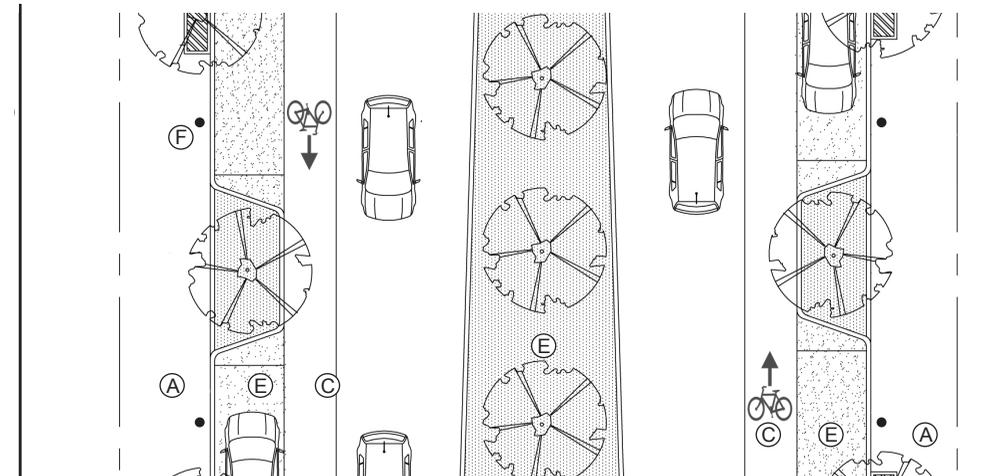
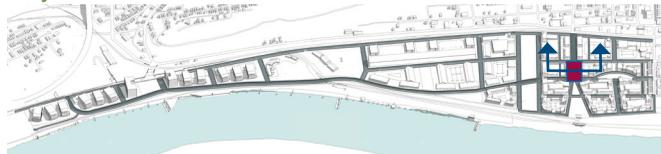
Pervious Parking Lane	8'
Parking Lane Bulb outs	Every fourth space
Median	10' - 25', tapered

F. Site Lighting Component

Mixed-Use Area	Refer to components
----------------	---------------------



Key Plan



HAZELWOOD AVENUE

45-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General

Movement Type	Slow
Design Speed	25 mph

A. Sidewalk Zone

Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	6'
Street Tree / Furniture Zone	4'

B. Intersection and Curb Zone

Sidewalk Planter	Refer to components
------------------	---------------------

C. Bicycle Component

Bike Lanes	6' per Lane
------------	-------------

D. Trails Component

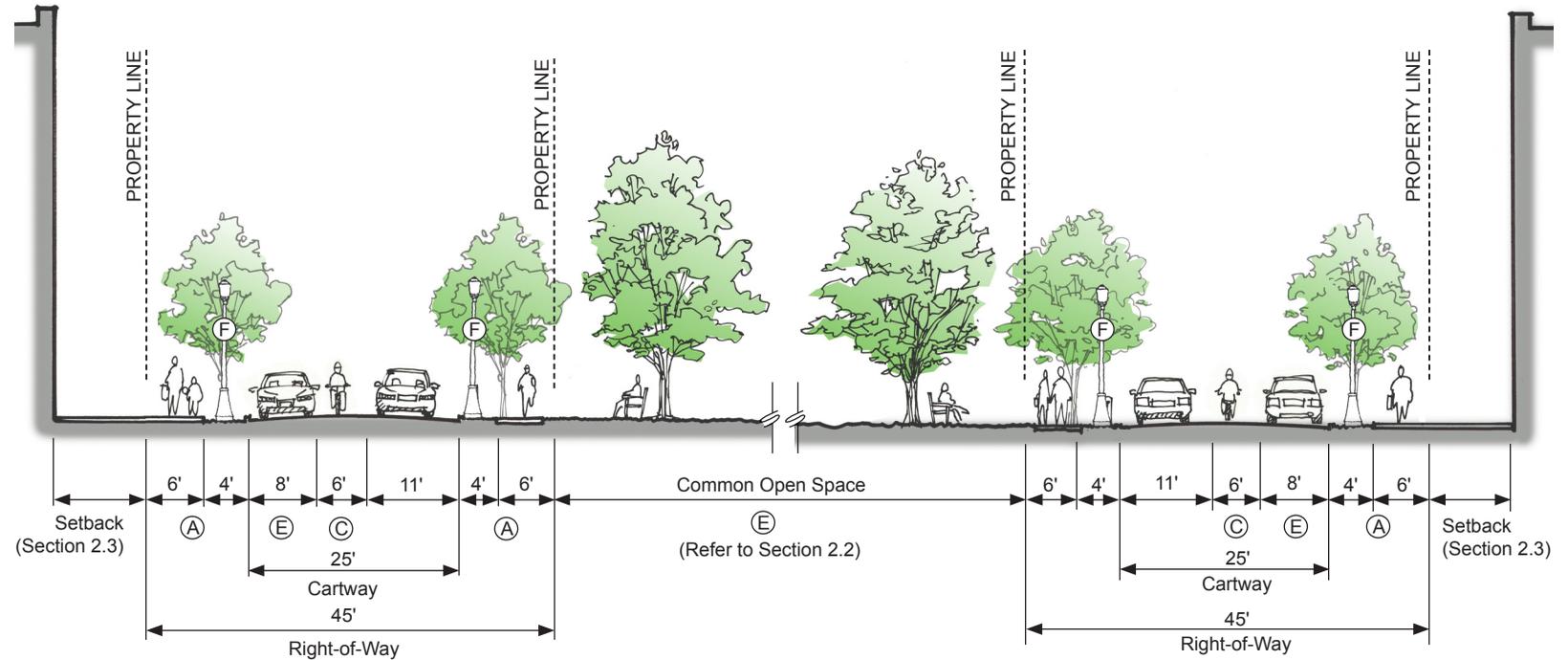
	Not Applicable
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E. Low Impact Design Component

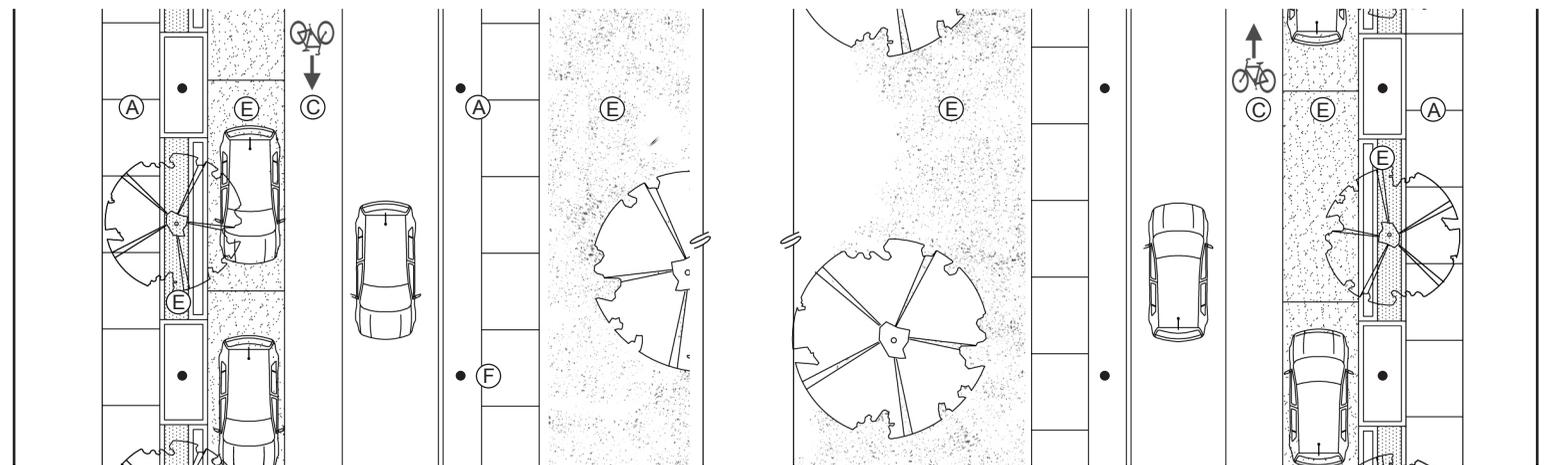
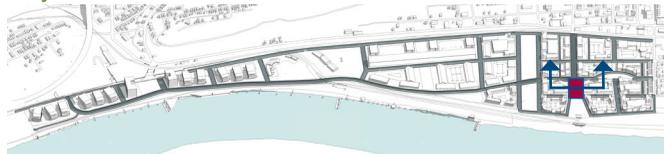
Pervious Parking Lane	8'
Parking Lane Bulb outs	Every fourth space
Common Open Space	Width Varies

F. Site Lighting Component

Mixed-Use Area	Refer to components
Common Open Space	



Key Plan



NEIGHBORHOOD STREET

60-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General

Movement Type	Slow
Design Speed	25 mph

A. Sidewalk Zone

Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	6'
Street Tree / Furniture Zone	5'

B. Intersection and Curb Zone

Planter Strip	Refer to components
---------------	---------------------

C. Bicycle Component

Sharrow	Per Lane
---------	----------

D. Trails Component

	Not Applicable
--	----------------

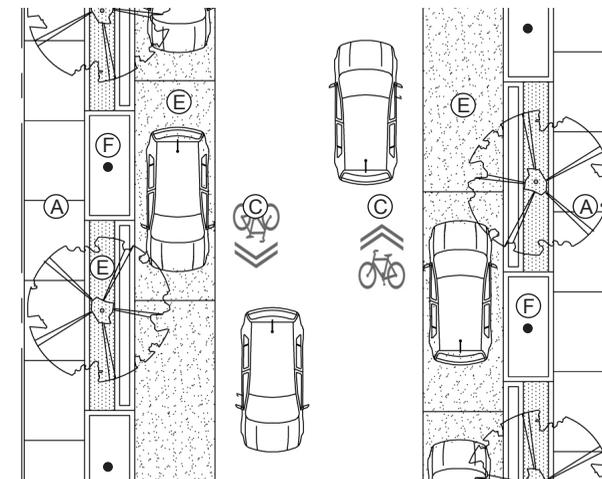
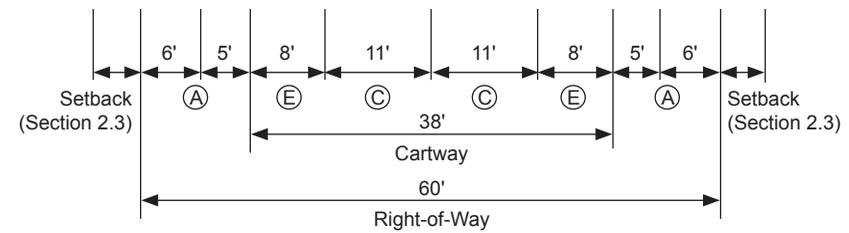
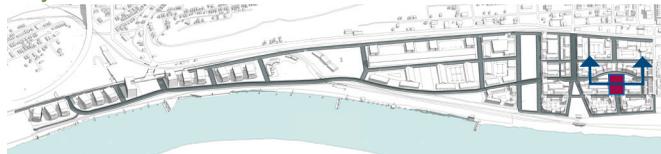
E. Low Impact Design Component

Pervious Parking Lane	8'
Pervious Furniture Zone	5'

F. Site Lighting Component

Mixed-Use Area	Refer to components
----------------	---------------------

Key Plan



LANE

45-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General

Movement Type	Shared / Pedestrian
Design Speed	10 mph

A. Sidewalk Zone

Building Facade Zone	Refer to Section 2.3
Pedestrian Zone	6'
Street Tree / Furniture Zone	4'

B. Intersection and Curb Zone

Sidewalk Planter	Refer to component
------------------	--------------------

C. Bicycle Component

Bike Lanes	6' per Lane
------------	-------------

D. Trails Component

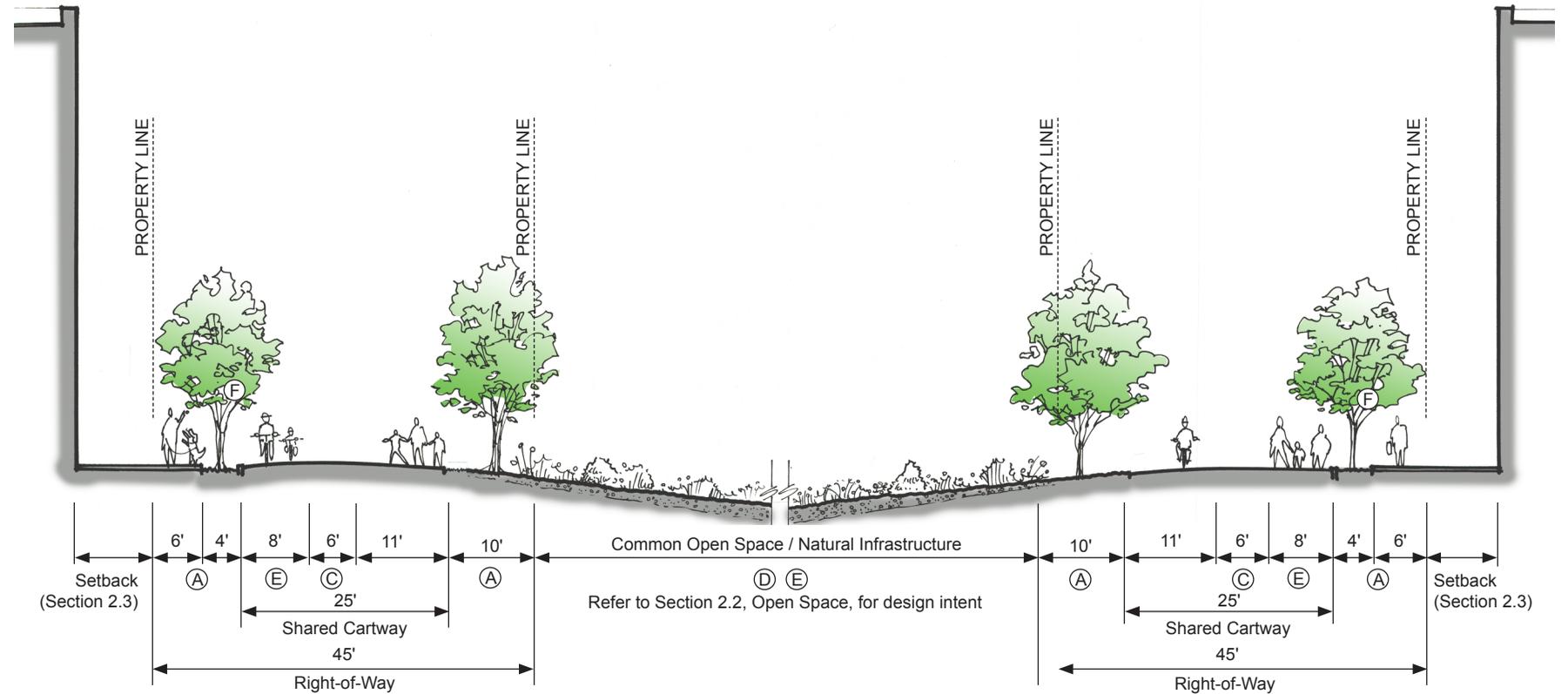
Common Open Space	Width Varies
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Pervious Parking Lane	8'
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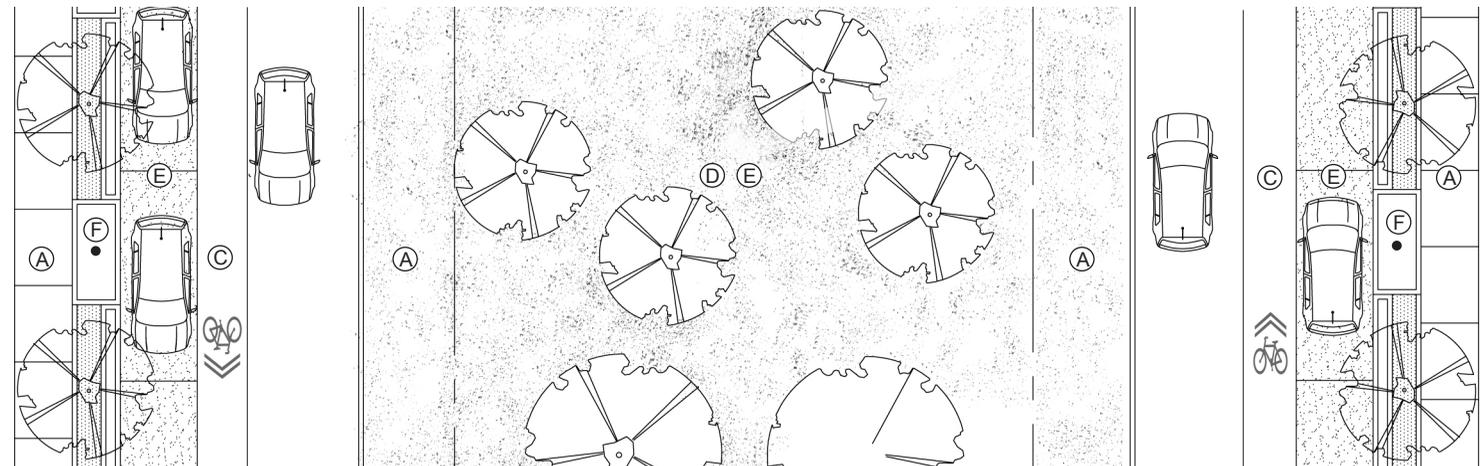
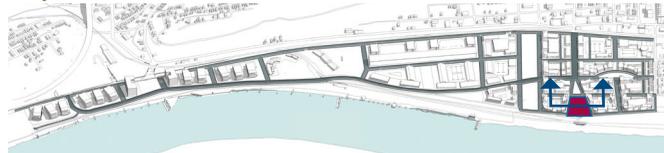
Common Open Space	Width Varies
-------------------	--------------

F. Site Lighting Component

Residential Area	Refer to components
Common Open Space	Refer to components



Key Plan

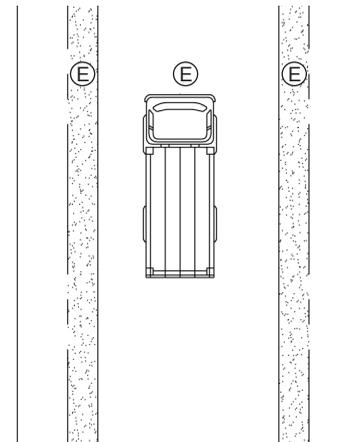
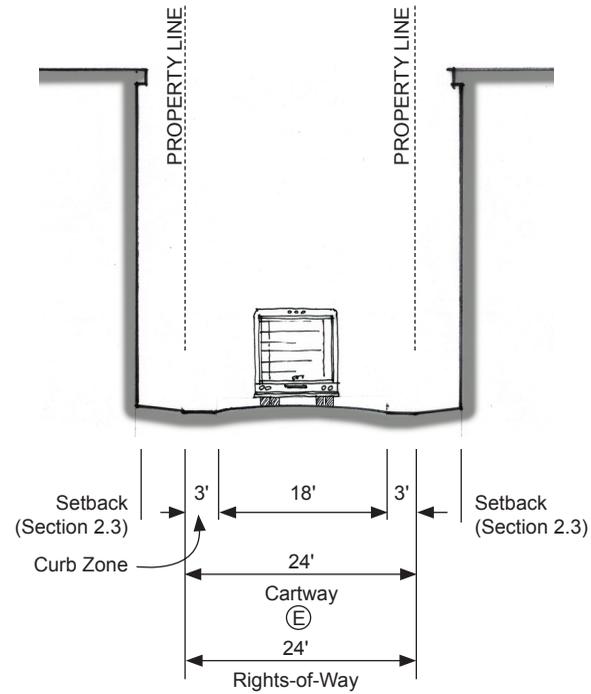


WAY

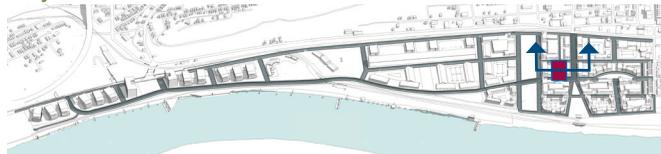
24-Foot Right-of-Way

RIGHTS-OF-WAY ASSEMBLY

General	
Movement Type	Slow
Design Speed	10 mph
A. Sidewalk Zone	
B. Intersection and Curb Zone Not Applicable	
C. Bicycle Component Not Applicable	
D. Trails Component Not Applicable	
E. Low Impact Design Component	
Pervious Curb Zone	3' where applicable
Pervious Vehicle Lane	18' where applicable
F. Site Lighting Component	
Mixed-Use Area	Refer to components



Key Plan



RIGHTS-OF-WAY COMPONENTS

Putting Together Complete Streets

The Rights-of-Way are composed of public realm components that are appropriate for different street assemblies and locations. Components address recommended design strategies for the different zones identified within the Assemblies section: the street cartway; street tree / furniture zone; pedestrian zone; and the building facade zone. Where applicable, components may be referenced in other Chapters - Building Design Standards prescribe Facade Zone requirements, for example.

The public realm components described in this Chapter are not intended to provide guidance on specific aesthetic materials or construction technologies.

Relevant City of Pittsburgh design standards should be consulted for approved materials and installation requirements.



Sidewalk Zone



Intersection and Curb



Bicycle and Trails Component



Low Impact Design Component



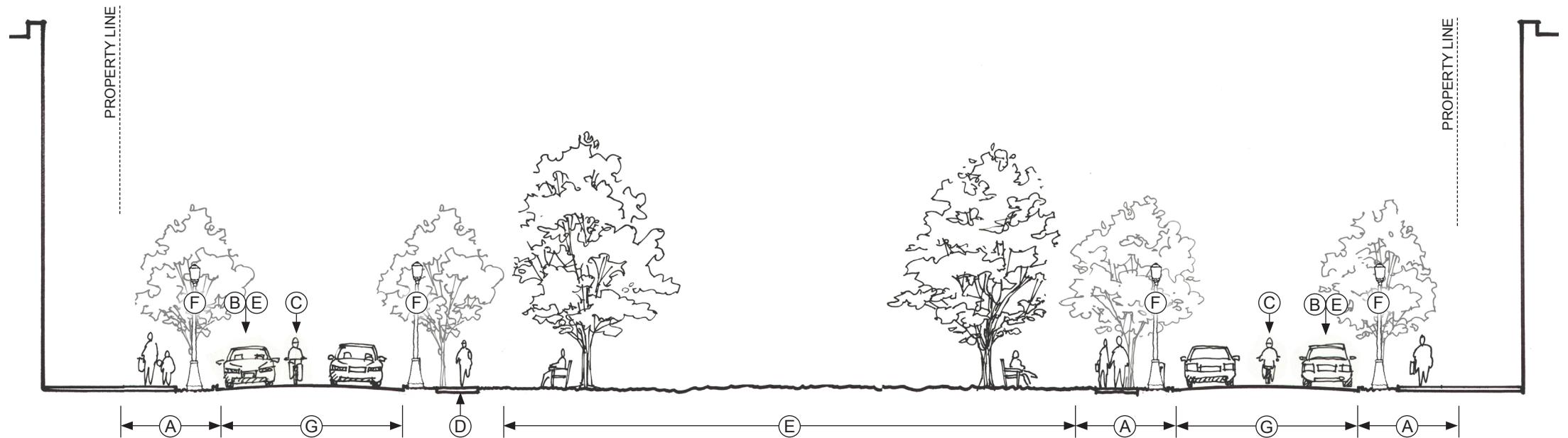
Site Lighting Component



Utilities and Equipment

Identified Components

- Ⓐ **Sidewalk Zone** the area including the Building Facade Zone, Pedestrian Zone, and Street Tree / Furniture Zone. Sidewalks that are designed to provide an attractive pedestrian environment serve various public realm functions.
- Ⓑ **Intersection and Curb Zone** the interface of intersections, curbs and cartways. Context-sensitive intersection and curb design provides specific levels of treatment based on location and rights-of-way assembly to facilitate safe multi-modal crossings.
- Ⓒ **Bicycle Component** design elements located within the public realm intended to increase the viability of choosing alternative modes of transport. Bike lanes, parking infrastructure, and other elements such as signage comprise the bicycle component.
- Ⓓ **Trail Component** design elements within the public realm that create a pedestrian and bike oriented path network. Trailheads, both street-adjacent and riverfront trails connect and extend a comprehensive circulation network as an alternative transport mode.
- Ⓔ **Low Impact Design Component** green streets and other sustainable techniques of mitigating the effects that stormwater runoff has on the aging regional combined sewer systems.
- Ⓕ **Site Lighting Component** context sensitive public realm lighting intended to increase visibility and safety for motorists, pedestrians, and cyclists.
- Ⓖ **Utilities and Equipment component** gas, water, communications, electric, and other services placed below ground and equipment placed above ground. Hydrants and signage are located in the Street Tree / Furniture Zone.



SIDEWALK ZONE COMPONENT

Sidewalk zone components provide an attractive pedestrian environment that contribute to serving various public realm functions and services. Component elements and dimensions vary per their locations in districts and thoroughfare assembly - residential streets do not require the street furniture width that mixed-use streets require, for example. The sidewalk zone is composed of three complementary elements:

Building Facade Zone includes the building facade that fronts onto and articulates the public realm and open spaces. Refer to the specific district Frontage standards in Section 2.3 for additional information.

Pedestrian Zone includes the sidewalk area that provides a clear paved walking surface in compliance with accessibility and City of Pittsburgh standards.

Street Tree and Furniture Zone contributes an important role in organizing the sidewalk zone to achieve an attractive pedestrian environment.

The overall organizing element is the street tree. A mature canopy provides a sustainable approach to stormwater management, increases project value, and helps reduce the overall street cross-section. The next layer of organization is contributed by site lighting. Posts should be located at the midpoint between two street trees. Additional components - bike racks, benches, hydrants, etc. - populate the additional area in the zone as required.



BICYCLE COMPONENT

An integrated and comprehensive bicycle component provides an alternate choice of transportation as part of a multi-modal transportation network.

Refer to *NACTO Urban Bikeway Design Guide* for additional information.

Cycle Tracks are exclusive bicycle infrastructure separated from vehicular and pedestrian traffic. Strategies to separate the cycle track include on-street parking, flexible bollards, raised pavement, or planted medians.

Lanes and Sharrows provide additional components in Almono's bicycle network. Whereas cycle tracks are ideal for "arterial" type thoroughfare movement, bike lanes and sharrows provide flexible neighborhood connections and access to businesses and residences. Lanes may or may not be buffered but are clearly defined within the cartway assembly. Sharrows located on lower-traffic streets are included in the bicycle network and alert motorists to the presence of cyclists.

Parking Infrastructure provides important end-of-trip facilities that make cycling a viable and acceptable alternative mode of transportation. Corrals located on or off street and bike racks located in the Sidewalk Zone increase the parking capacity of mixed-use areas, common open space, and trailheads.

On-Parcel Infrastructure contributes toward building occupant acceptance of multi-modal options. In addition to building interior options available with LEED certification, exterior options include covered bike racks and storage.



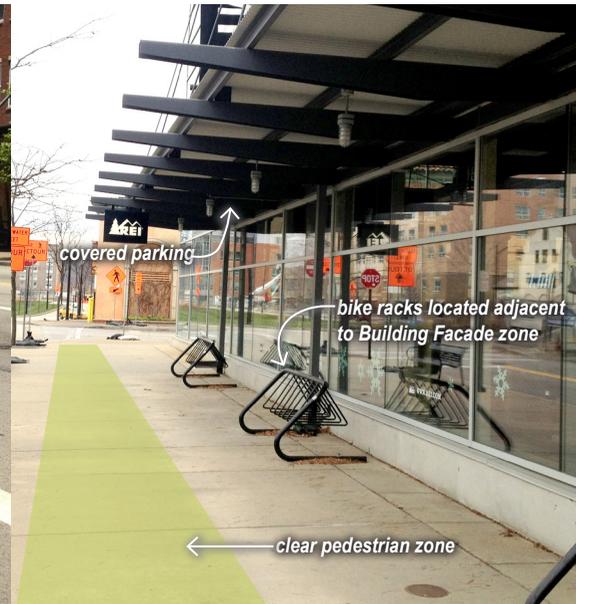
Buffered Cycle Track at the Waterfront



On-Street Bike Lane on East Carson Street



On-Street Bike Corral on East Carson Street



On-Parcel Bike Rack

TRAIL COMPONENT

Trail components provide an attractive public access environment that attracts a range of recreational users from casual, slower-paced walkers to faster-paced road cyclists. Component elements can enhance the aesthetic experience while providing safe passage and public access for multiple types of users.

Paths provide access for recreational uses and may include multi-purpose or general purpose surfaces. Multi-purpose trails should be wide enough to accommodate pedestrians and cyclists at the same time and surfaced in asphalt, concrete, pavers or

equivalent material. General purpose trails are provided where cyclists are provided with alternate facilities and surfaced in materials suitable for pedestrian access.

Landscape trail character design conceived through place specific site forces provide opportunities to identify changes in character and location. Refer to Section 2.2, Open Space, and Section 3.2, Landscape Sections for additional information.

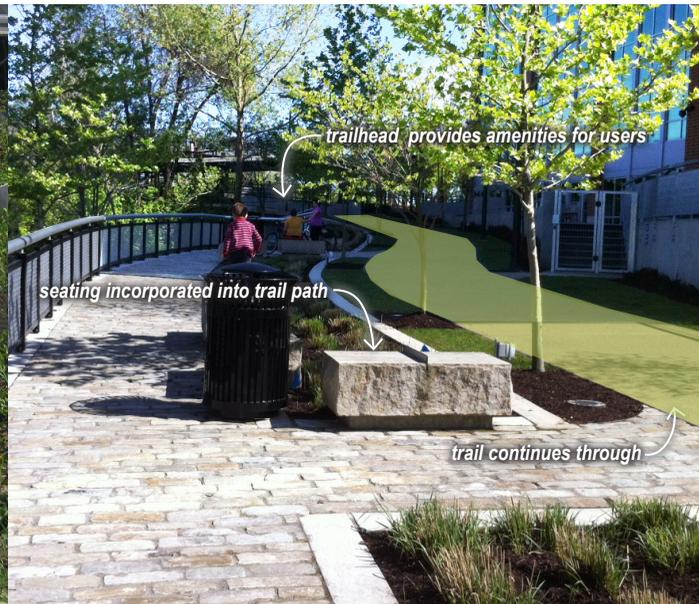
Events are locations acceptable for public seating and rest. Event locations may be incorporated as part of

trail heads or as separate components along the trail network.

Trailhead Connections and access points are primary means of accessing the trail network and provide opportunities to connect and celebrate areas of significant interest. Connection areas may be standalone trail heads or incorporated into common open spaces, plazas, or commercial areas. Amenities may included rest room facilities, cultural heritage information, maps, or other recreational facilities. Refer to Section 1.3, Site Systems for potential locations.



Multi-purpose riverfront trail at the convention center



Riverfront trail head at the South Side Works



Multi-purpose trail crossing at rail tracks



Multi-purpose trail with separate surface materials

LOW-IMPACT DESIGN COMPONENT

Low impact design components provide a toolkit of landscape and urban design techniques that help achieve a balanced approach in managing stormwater at the source rather than conveying runoff to containment and end-of-pipe facilities. In addition to techniques applicable to LEED certification, components may include:

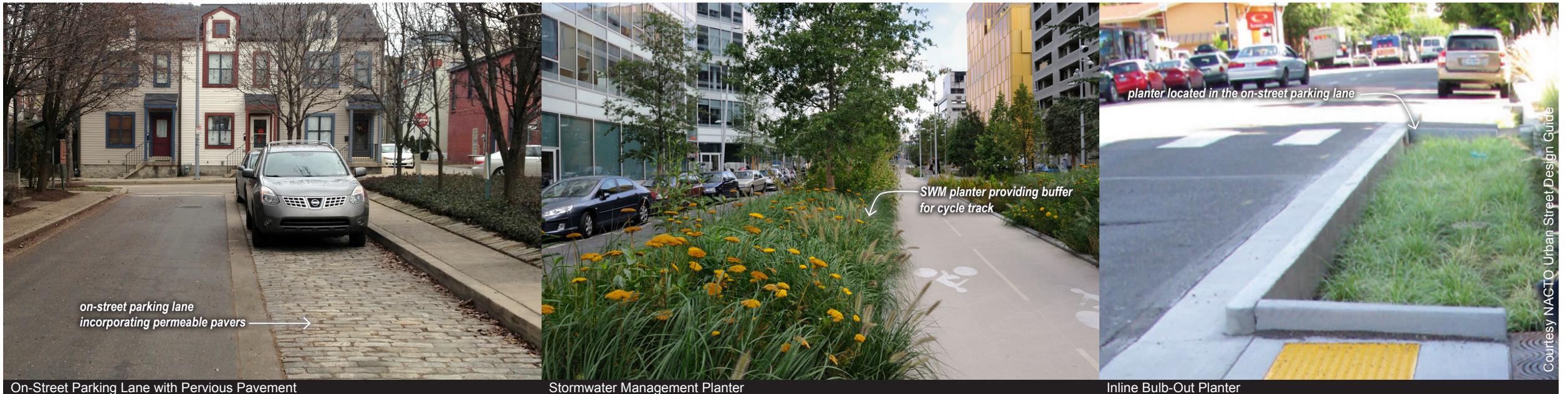
Pervious Pavement and other paving materials can be used to locally infiltrate rainwater at the source, reducing ponding and runoff into the existing stormwater management system.

Continuous Tree Trench Filters provide a system of trees - either street trees or open space landscape - connected by an infiltration system beneath grade. Similar to rain gardens, tree trenches act as bio-retention areas that contribute to controlling stormwater locally. Tree irrigation is an additional system benefit.

Stormwater Bulb-Outs are curb extensions that include small curb cuts that channel runoff into the bulb-out to be stored and infiltrated.

Planters provide sidewalk and median options to capture, store, infiltrate, and provide evapotranspiration for local stormwater.

Refer to Section 3.1, Green Infrastructure for additional information.



On-Street Parking Lane with Pervious Pavement

Stormwater Management Planter

Inline Bulb-Out Planter

SITE LIGHTING COMPONENT

Almono Site Lighting Standards encourage the use of sustainable technologies that reduce energy consumption and light pollution.

For additional information and requirements, refer to Chapter 1201 of the City of Pittsburgh Lighting Code and the Streetscape Components Catalogue.

See Section 3.3 for more information.

Thoroughfares Public thoroughfares shall utilize the City of Pittsburgh neighborhood single pole standard fixture.

Common Open Spaces The City pedestrian standard fixture should be used in Common Open Spaces that are publicly accessible. Artistic lighting installations are also encouraged.

Mixed-Use Areas The City pedestrian standard fixture should be used in Common Open Spaces that are publicly accessible. Furthermore, store front lighting is encouraged to promote safe pedestrian environments.

Trails and Riverfront For development along the riverfront and for trail lighting the Downtown Waterfront Standard shall be used.

Building Facade Building facade illumination shall be indirect wall washing. Architectural highlighting is encouraged.

Parking Surface and structured parking should be well-lit to provide a safe environment while incorporating sustainable energy-reducing technologies.



Thoroughfares Lighting example



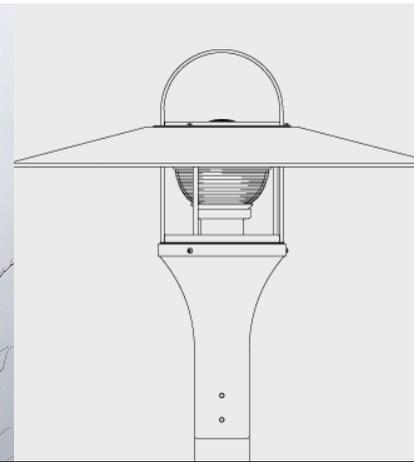
Common Open Spaces



Artistic Common Open Space Lighting



Mixed-Use Areas with Pole Banner



Trails and Riverfront Lighting



Building Facade Lighting

UTILITIES AND EQUIPMENT COMPONENT

Below ground utilities, both public and private, are intended to be located within the rights-of-way. Utility and telephone transformers, meters or boxes, air compressors, generators, and similar equipment are prohibited from locating within the Sidewalk Component Zone, Civic Zone, Primary Street Frontage or along the Signature Boulevard.

Where required, and based upon the approval of the Almono review authority, traffic control boxes shall be located within the Street Tree / Furniture Zone.

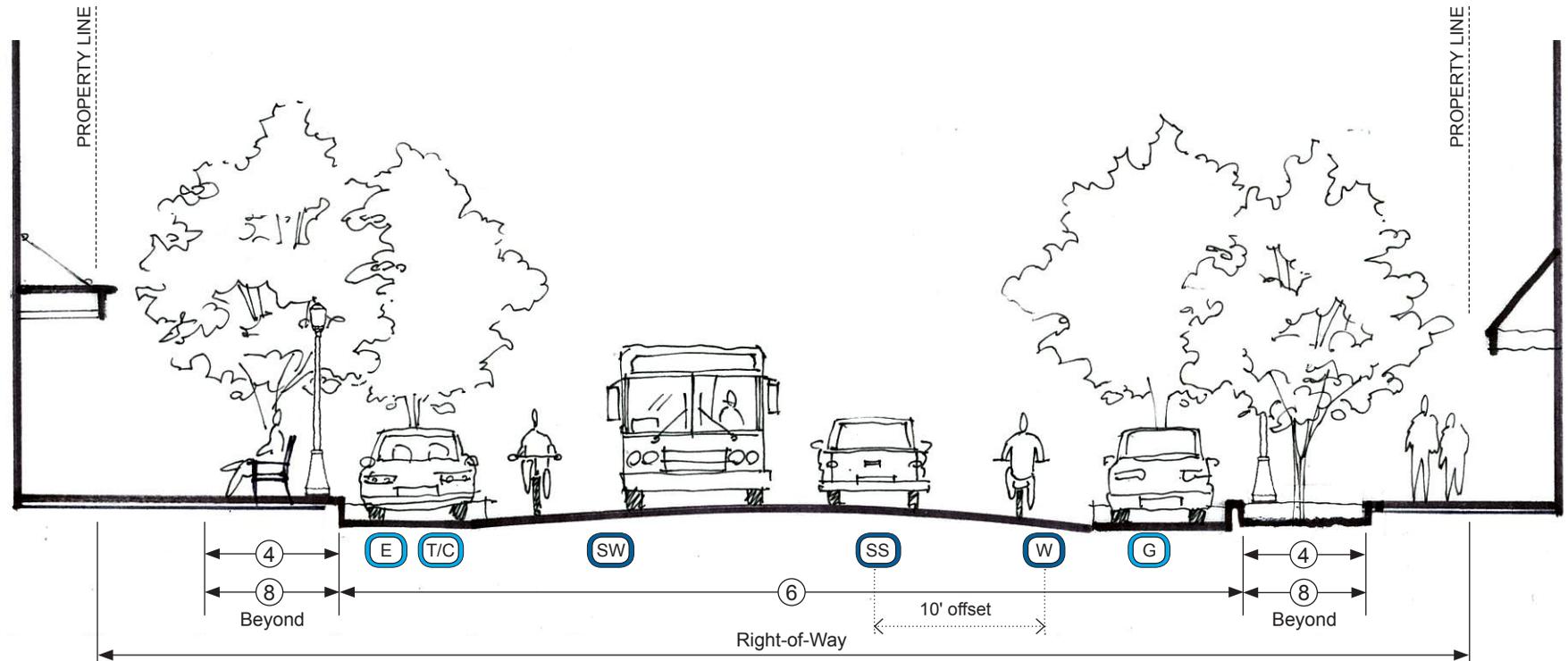
Component areas reference the Almono Assembly Toolkit on page 2.1 - 04:

- ④ **Street Tree / Furniture Zone** Above grade utility components shall be coordinated and located within this zone. Utility boxes within the Signature Boulevard shall be located below grade.
- ⑥ **Utilities Zone** Both public and private gas, water, communications, electric, and other necessary services are placed below ground and above ground in this zone.

- ⑧ **Green Infrastructure Zone** This zone allows for the integration of Low Impact Development techniques to manage stormwater run-off and should be free of utilities.

Legend

- Public
- ③ SW Stormwater line location
- ③ SS Storm Sewer line location
- ③ W Water line location
- Private
- ③ G Gas line location
- ③ E Electric line location
- ③ T/C Telephone / Cable line location





SECTION 2.2

OPEN SPACE

Types	2.2 - 01
Green Infrastructure	2.2 - 02
Places	2.2 - 03

TYPES OF OPEN SPACE

Almono Open Spaces

All open spaces connect to the Signature Boulevard and are further interconnected by a right-of-way network that correlates the function of the open space with the hierarchy of thoroughfares. Open space guidelines present a context-based approach where places are defined by their location and fronted by buildings. Each open space defines a meaningful destination and function intended to balance recreation, preservation of the natural environment, area infrastructure, and stormwater management. Features within open spaces may include trailheads, public gathering places, or ecological infrastructure.

Interim open space will be developed before final design and construction of the open space. The final design of the open space will be coordinated with adjacent building construction. The intent of interim open space is to provide graded and vegetated space that is accessible by the general public and to utilize both interim and final open space for storm water management facilities. The Almono open space plan includes two types of open space: Common Open Space and Parcel Open Space.

sions of Urban Open Space defined in the SP District zoning code requirements. It is envisioned that common open spaces will incorporate facilities for rest rooms, food vendors, and other public activities. Public access to open space does not imply ownership by the City.

Parcel Open Space denotes land adjacent to buildings that is privately owned and managed. This section describes the intent of the parcel open space design relative to the Vision for the site. This document is not intended to regulate the design of designated parcel open space.

Common Open Space denotes publicly-accessed land within the public realm that contributes towards the provi-



pier provides recreational access to the water

landscape features connect pedestrians to the water



spectator zones

active, public recreation facilities serve a wide range of ages



engaging civic design features

heightened social interaction



natural infrastructure with a variety of texture and planted material

Open Space in Placemaking provides for a public realm within all scales of walkable communities - from regional destinations in Districts, to plazas for neighborhood residents, to green courts for parcel users.

Open Spaces for Play Active recreation spaces designed for multiple scales of use are included in the open space system, consisting of regional-scale recreational playing fields and smaller playgrounds equipped for children.

Celebrating the Public Realm with passive recreation space established for unstructured gathering & enjoyment of the open space and positioned at context-specific locations.

Natural Infrastructure Sustainable techniques that approach the mitigation of stormwater runoff at the source through containment and infiltration to reduce the amount of runoff directed into the sewer system.

OPEN SPACE GREEN INFRASTRUCTURE

Performance-based Landscapes

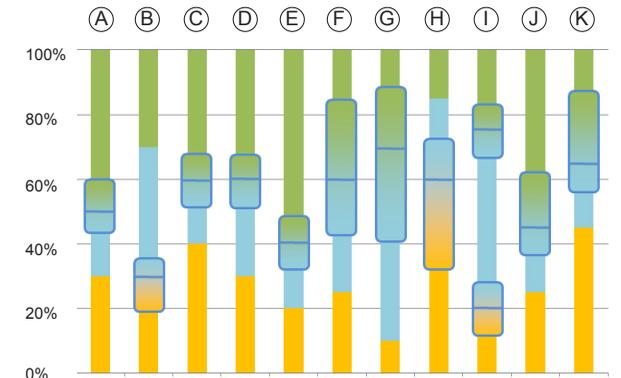
Almono open spaces will perform multiple roles:

- ▶ Passive Landscape Elements (vegetated and turf areas, gardens, plazas, walkways, seating areas, etc.)
- ▶ Active Landscape Elements (trails, playgrounds, athletic fields, etc.)
- ▶ Green Infrastructure (swales, green roofs, pervious parking lots, cisterns, etc.)

The built context and the stormwater requirements of these open spaces will inform the degree to which the above elements are present in any given location. Ideally, however, there will be overlap in the performance of these spaces. Passive and active landscape elements will be designed to simultaneously perform green infrastructure roles allowing the dedicated green infrastructure areas to decrease in size thereby providing more open space experiences to Almono residents, tenants, and visitors.

■ Passive Landscape
 ■ Green Infrastructure
 ■ Active Landscape

Landscape Performance Graph



11% to 15% (19.28 - 26.8 acres)

Almono site area dedicated toward Common Open Space

- (A) Riverview Campus Green
- (B) Four Mile Run Plaza
- (C) Four Mile Run Falls
- (D) Roundhouse Green

10% (17.8 acres)

Urban Open Space required per Specially Planned District

- (E) Energy Fields
- (F) Eco-Tech Run
- (G) Eco-Tech Pond 2.6 acres
- (H) Hazelwood Fields 5.8 acres
- (I) Hazelwood Run 2.2 acres
- (J) Flowers Park 0.7 acres
- (K) Riverfront Trail 14 acres

- Common Open Space
- Parcel Open Space
- - - Almono Site Property Line
- - - District Boundary

Ⓐ RIVERVIEW CAMPUS GREEN

Parcel Open Space

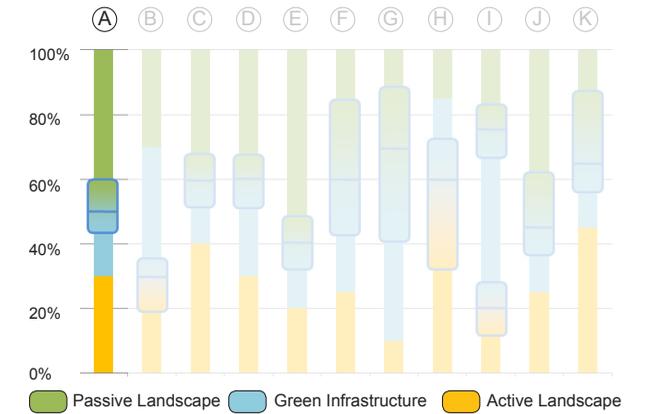
Riverview Campus Green consists of a series of open space plazas surrounding the medium-density buildings throughout the Riverview District. These plazas are privately-owned open spaces, intended to be utilized by those working at, living in, or visiting the mixed-use developments intended for this area.

The Landscape Performance Chart, *left*, describes the intended profile of the open space at Riverview Campus Green. Passive landscape and green infrastructure comprise the majority of the open space in Riverview Campus Green. The landscape will accommodate

daytime uses and provide shared outdoor gathering space for the building users and pedestrian paths linking buildings.

These passive landscapes also provide on site stormwater management. For more information on green infrastructure and its role in the landscape, please refer to Section 3.1, Green Infrastructure, and Section 3.2, Landscape Guidelines.

Landscape Performance Graph



Path through Rain Garden, Salvation Army

Green Street, Montgomery

Green Street, Montgomery

Ile Seguin, Boulogne, France



④ FOUR MILE RUN PLAZA

Common Open Space

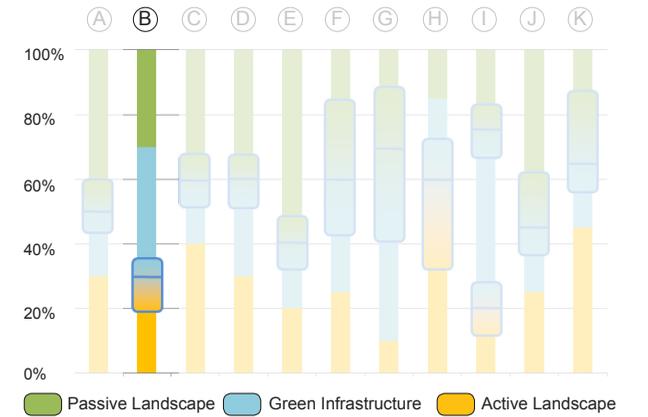
Four Mile Run Plaza serves as an amenity in a high-density area of the Riverview District. This public plaza is positioned to be a connection point to the river for the site's users, but is also poised to serve as a regional destination serving the surrounding East End communities, including Oakland, Squirrel Hill, Greenfield, and the Run.

The performance profile of this space, *left*, intends the site to serve a majority of passive uses, such as plaza spaces and planted and vegetated landscape areas, while still providing significant stormwater management.

Amenities such as food vendors, performance possibilities, or other programming intended to draw activity may be provided. Relating the lawn's design to neighboring buildings will promote access and connection to the surrounding ground floor uses.

Green infrastructure elements that could be considered include naturalized basins with diverse and attractive plantings and vegetated swales adjacent to the Signature Boulevard. For more information, please reference Section 3.1, Green Infrastructure, and Section 3.2, Landscape Guidelines.

Landscape Performance Graph



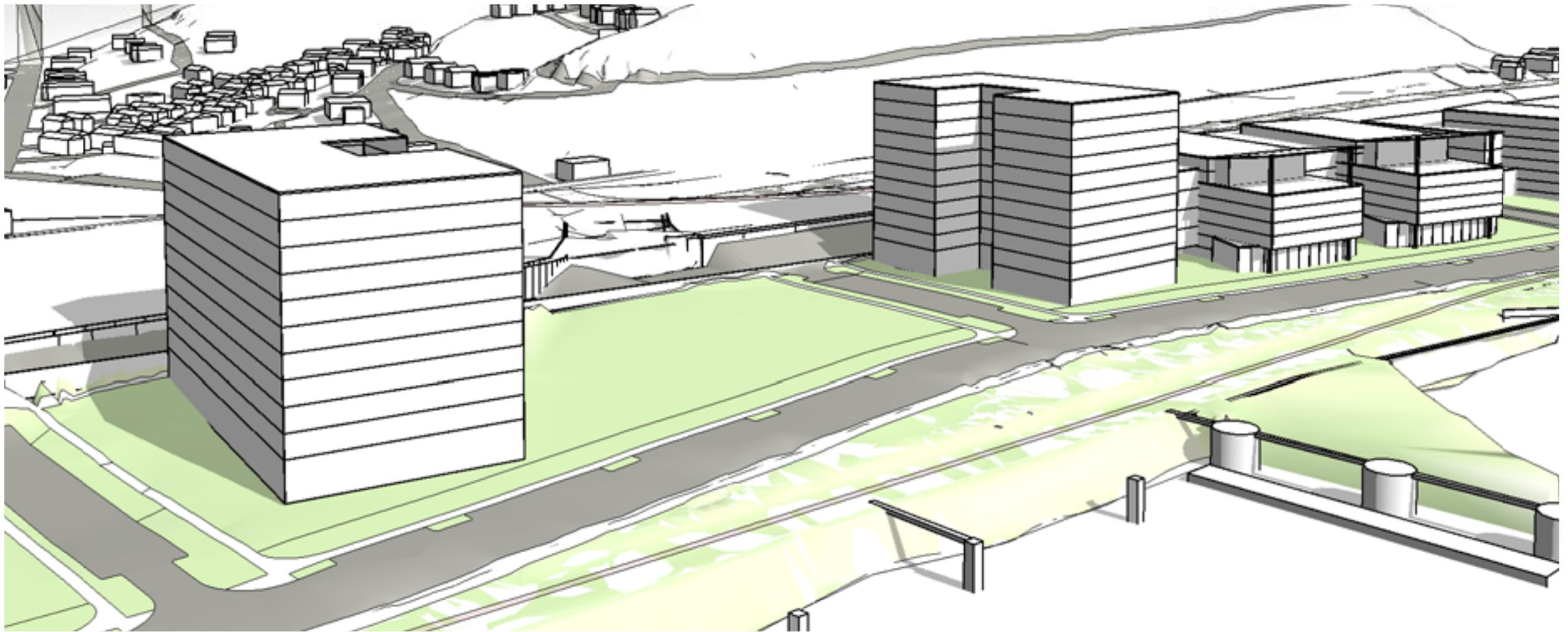
Shoemaker Green at the University of Pennsylvania



Shoemaker Green at the University of Pennsylvania



Schenley Plaza in Oakland



© FOUR MILE RUN FALLS

Common Open Space

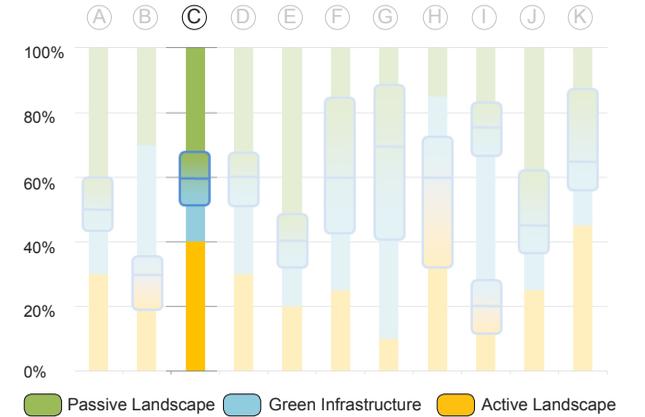
Four Mile Run Falls is a public destination on the Hazelwood Heritage Trail that serves as a trailhead, providing gathering space, seating, and bicycle parking for trail users. Additionally, Four Mile Run Falls is the outlet of the four watersheds that contribute to Four Mile Run.

This site intends serves active uses, providing trails, walkways, and seating for users. It also intends to provide passive landscape with attractive plantings that are also bioretention areas. The plantings of the passive landscape are also intended to prevent erosion and

stabilize the slope of Four Mile Run falls as this area meets the riverfront.

This site plays an important role in educating users about watersheds and natural ecology. In partnership with PWSA and Alcosan, green infrastructure provided along Four Mile Run Falls will bolster efforts to improve regional combined sewer overflow issues. Reference Section 3.1, Green Infrastructure, and Section 3.2, Landscape Guidelines, for more information.

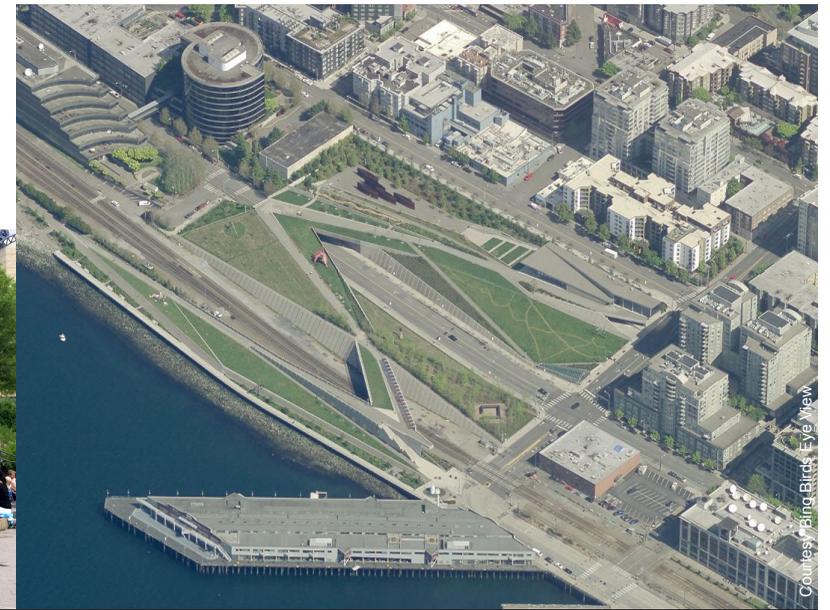
Landscape Performance Graph



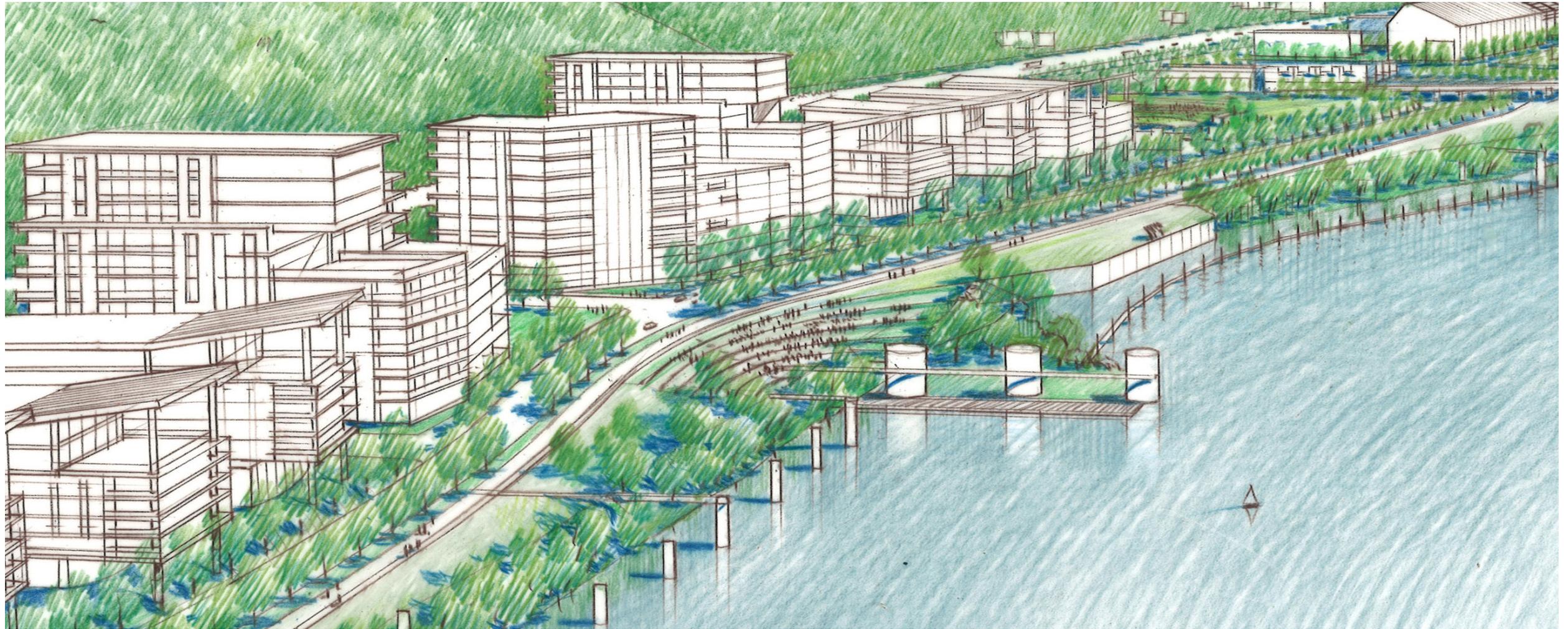
Riverfront Commemorative Park



Riverfront Watersteps along the North Shore, Pittsburgh



Olympic Sculpture Park, Seattle



④ ROUNDHOUSE GREEN

Parcel Open Space

Roundhouse Green is an outdoor destination along the Signature Boulevard. The green honors Hazelwood's rich history as an industrious community by celebrating a former industrial structure while simultaneously providing a place for gathering to serve its potential reuse.

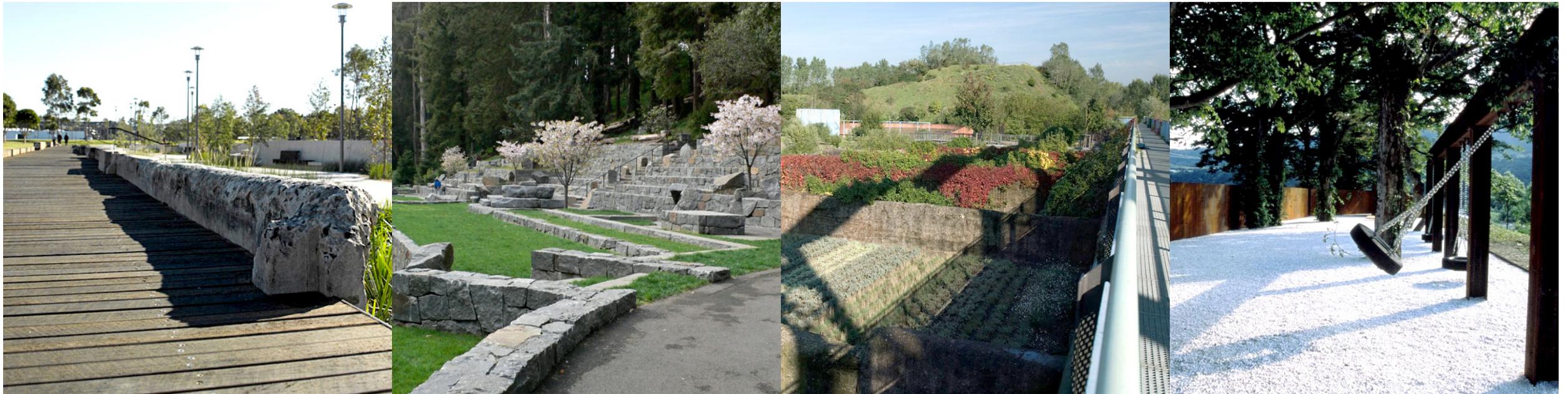
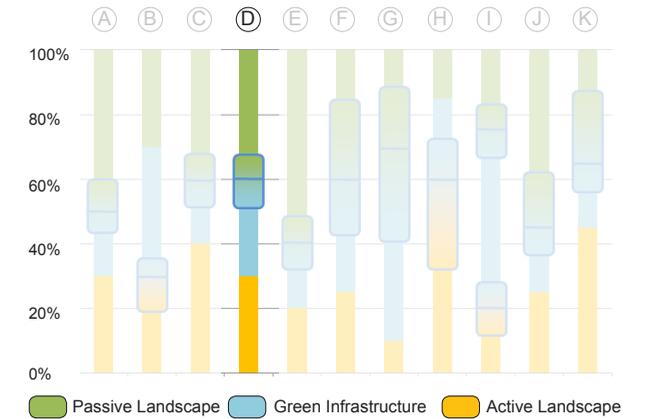
This open space is intended to be private property, and its character will contribute to sitewide overarching goals towards placemaking and connecting to the river. Passive and active landscapes, such as plaza space and pathways, and green infrastructure comprise the

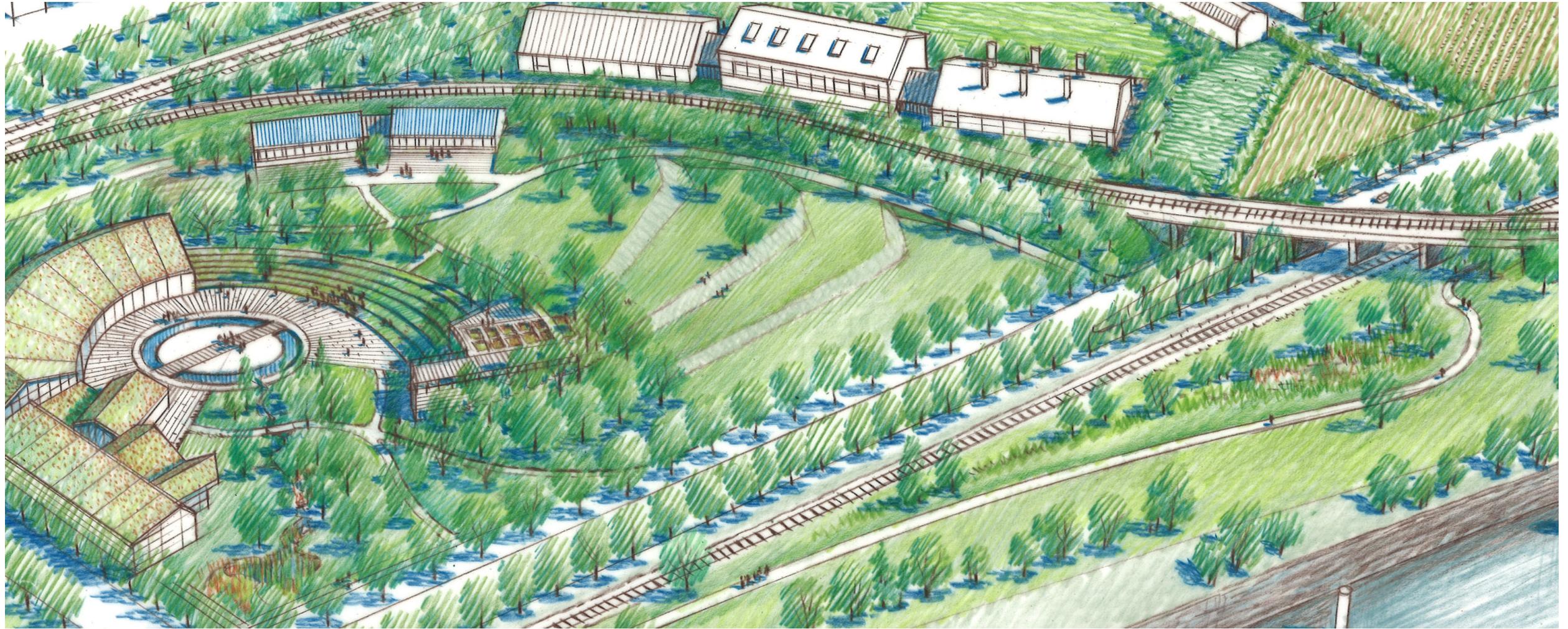
majority of the landscape performance profile of this area, as shown in the Landscape Performance Graph, *left*.

Green infrastructure also can become of the passive landscape of Roundhouse Green, utilizing a combination of plantings, rain gardens, and bioretention areas to create a visually compelling landscape that also serves as stormwater management on site.

For more information on Green Infrastructure and Landscape Guidelines, please refer to Sections 3.1 and 3.2.

Landscape Performance Graph





ENERGY FIELDS

Parcel Open Space

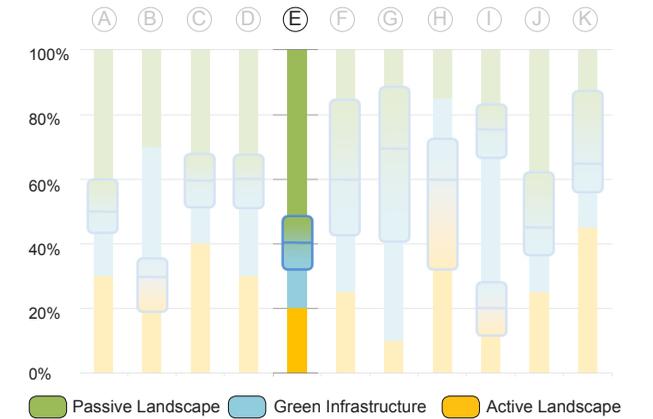
Energy Fields' land will be optimized by uses that experiment with hydroponic urban agriculture while concurrently celebrating the site's railroad history. These areas, as noted on the Landscape Performance Graph, *left*, are passive landscapes, and could include energy crops that support adjacent energy buildings, or a commercial use via a retail market shop.

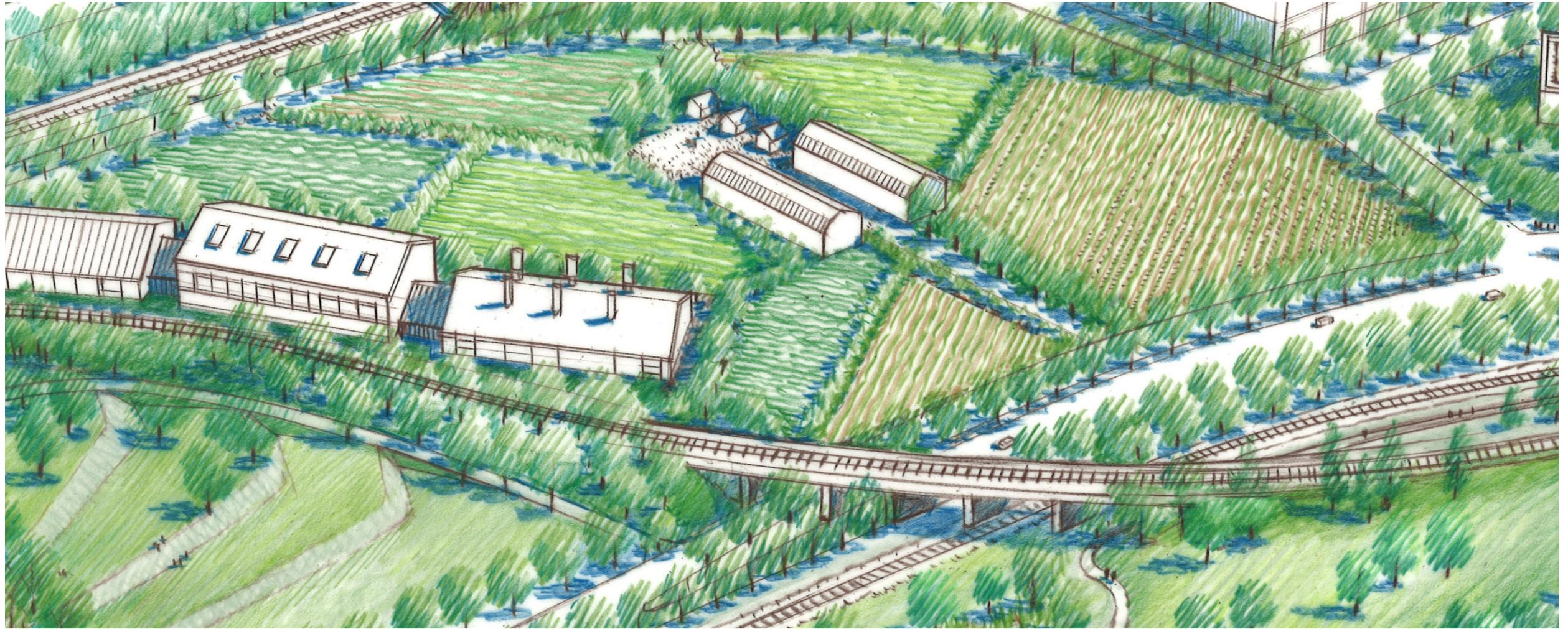
This land will be private property, but its character will contribute to site-wide overarching goals towards green

infrastructure. Vegetated swales that follow the rights-of-way near the railroad and the Signature Boulevard are green infrastructure elements that meet the stormwater management needs of Energy Fields.

Refer to Section 3.1, Green Infrastructure, and Section 3.2, Landscape Guidelines for information on integrating on site stormwater management with landscape and planting possibilities for Energy Fields.

Landscape Performance Graph





⑥ ECO-TECH RUN

Parcel Open Space

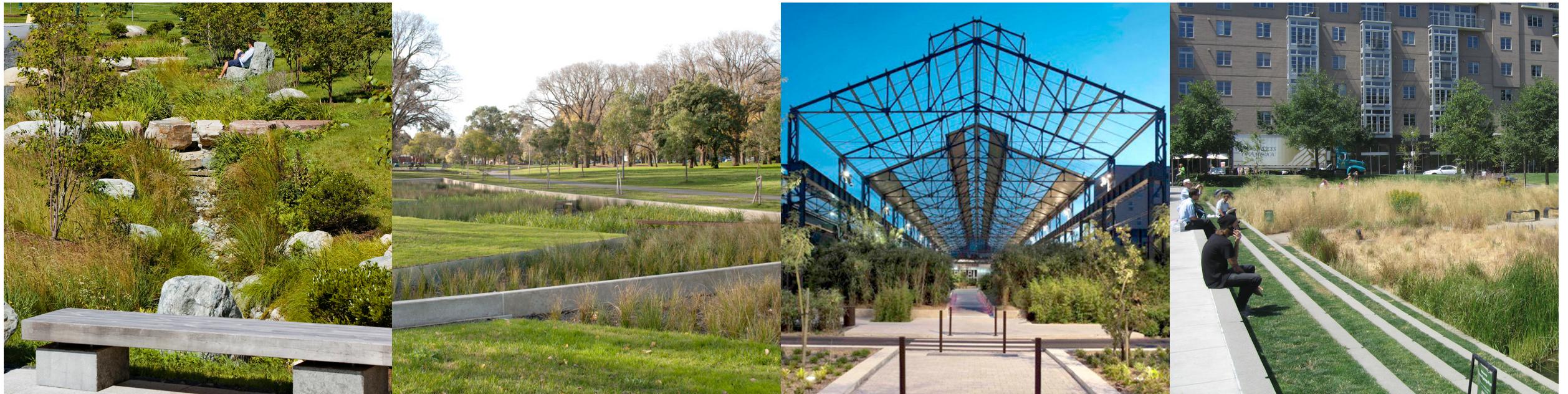
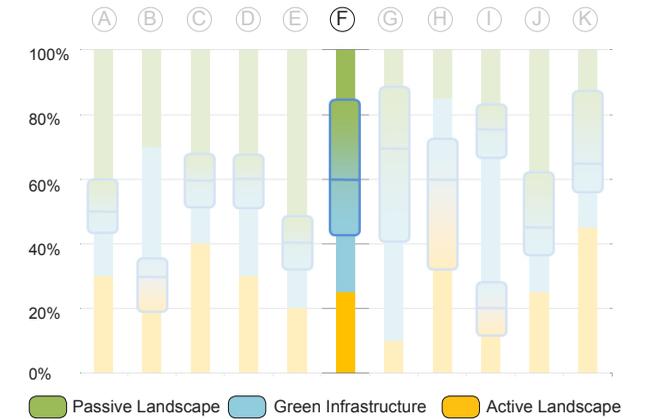
Eco-Tech Run is an open space with many possibilities. The multiple functions of Eco-Tech Run are desirable amenities to those interested in developing this area and the private open space associated with it.

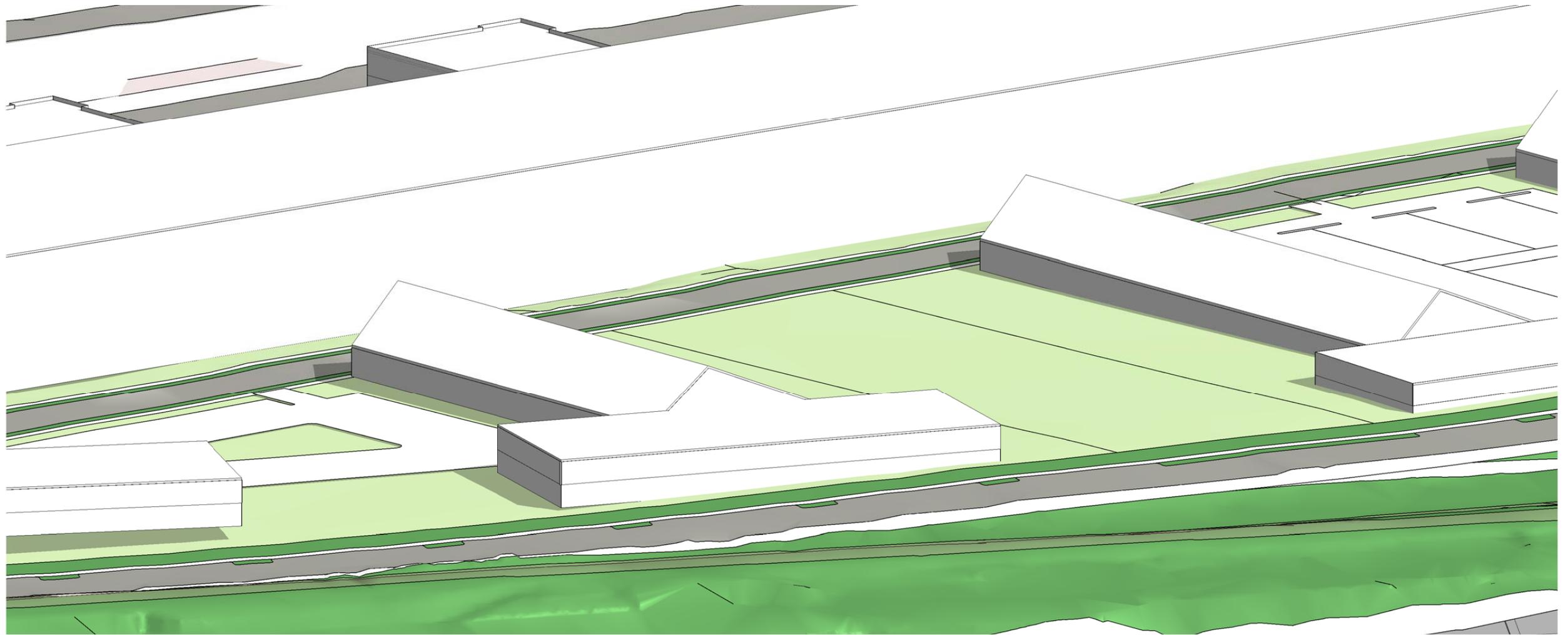
Although it is dedicated predominantly to the provision of green infrastructure for on site stormwater management, Eco-Tech Run also provides opportunities for active and passive landscapes for those who work on site as well as those visiting.

Active landscapes include connections from the industrial buildings to the riverfront, and afford people who work at and visit Eco-Tech Run an opportunity to connect with nature during the course of the work day. The green infrastructure of the run from Mill 19 to the river will serve as an area to treat stormwater from surrounding impervious areas.

Refer to Section 3.1, Green Infrastructure, and 3.2, Landscape Guidelines, for more information.

Landscape Performance Graph





Ⓒ ECO-TECH POND

Common Open Space

Eco-Tech Pond is a public open space that provides a visually compelling landscape buffer between the buildings and the railroad. The Landscape Performance Graph, left, highlights Eco-Tech Pond's intended use for green infrastructure for stormwater management. The plantings at the pond are also part of the passive landscape of the area.

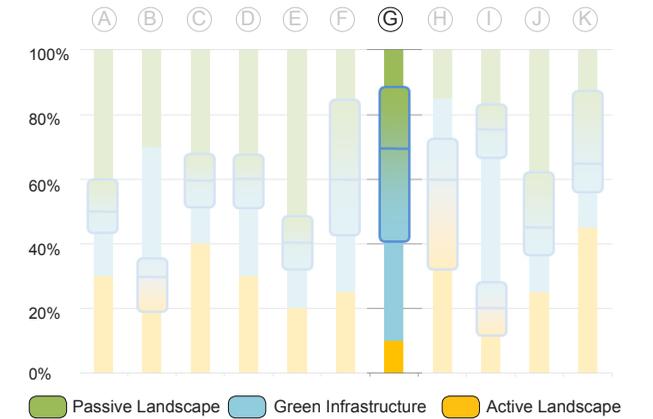
Portions of Eco-Tech Pond may become very deep, which provides an opportunity for the construction of walkways over and through the green infrastructure landscape. These walkways are passive landscape

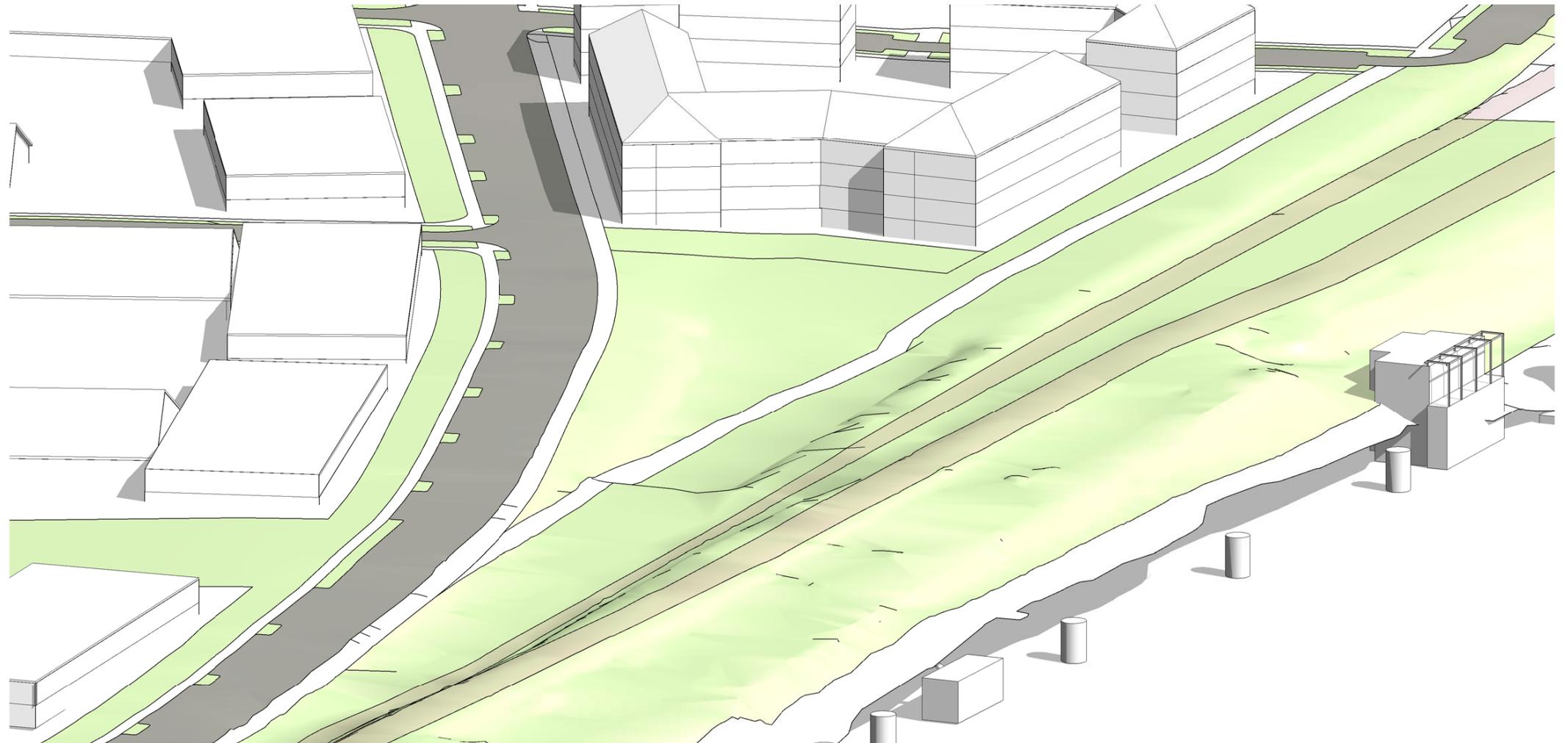
components that create a visual link for pedestrians to the landscape and its role in the ecology of the site.

Eco-Tech Pond also has a portion of its area dedicated to the provision of an active landscape. The trailhead comprises this active component.

Information on Green Infrastructure and Landscape Guidelines can be found in Sections 3.1 and 3.2.

Landscape Performance Graph





(H) HAZELWOOD FIELDS

Common Open Space

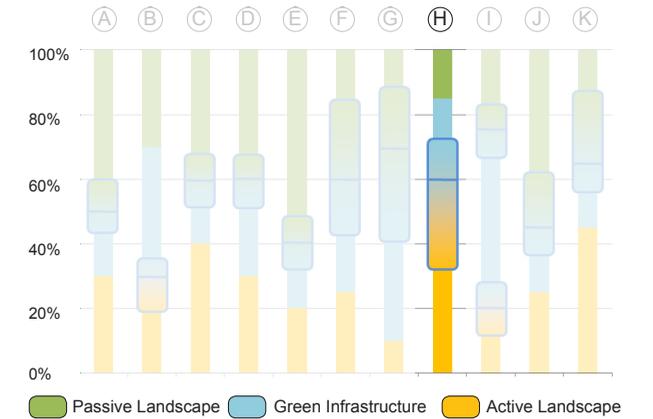
Hazelwood Fields is a large, public open space devoted to outdoor recreation. Local and regional community members can gather here for sport or general leisure. The Landscape Performance Graph, *left*, denotes that the primary landscape use in Hazelwood Fields will be that of an active landscape.

The fields will be suitable for sports and passive recreation. Amenities such as food and restrooms to serve the fields are intended to serve Hazelwood Fields.

Green infrastructure elements can be utilized at the landscape around the Signature Boulevard to create a place that provides active landscape uses, such as using pervious paving for the bicycle lane. Green infrastructure can also become part of the passive landscape at this key area by incorporating elements such as vegetated swales and water steps to bridge the elevation change between the Signature Boulevard and Hazelwood Fields.

Sections 3.1 and 3.2 provide more information on Green Infrastructure and Landscape Guidelines.

Landscape Performance Graph



Playground example



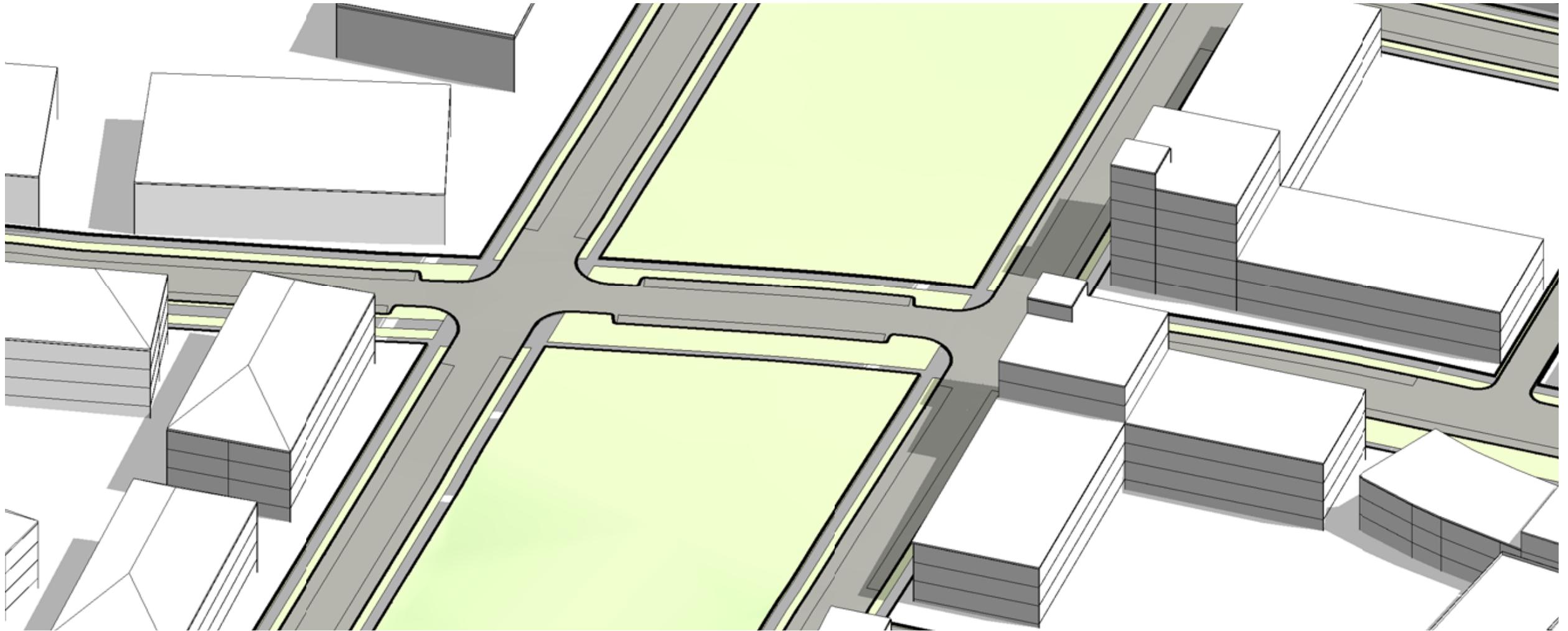
At grade rail crossing within open space



Active skate park example



Passive open space example



① HAZELWOOD RUN

Common Open Space

Hazelwood Run is public open space that joins a complete street, Hazelwood Avenue, with the potential for day-lighting of a natural waterway through the site. The Landscape Performance Graph, left, indicates that the majority of Hazelwood Run is intended to serve as green infrastructure. Active and passive landscapes are also provided, and contribute to the green infrastructure of the area.

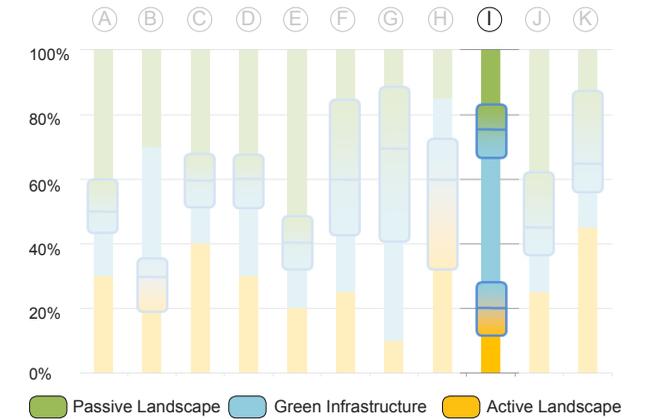
The active landscape of Hazelwood Run will accommodate pedestrian & bicycle traffic that serves the residences and mixed-use facilities at this end of the Almono site. Passive landscapes of Hazelwood Run will

not only serve as green infrastructure aiding in the day-lighting of the waterway, but will also utilize vegetation to stabilize the slopes and mitigate erosion.

Although the site is intended as a public area, common open space will mainly be provided at the area closest to Hazelwood Avenue. As the site gets closer to the river, green infrastructure will create natural stormwater facilities and become passive landscape components.

Please refer to Section 3.1 for information on Green Infrastructure, and 3.2 for Landscape Guidelines.

Landscape Performance Graph

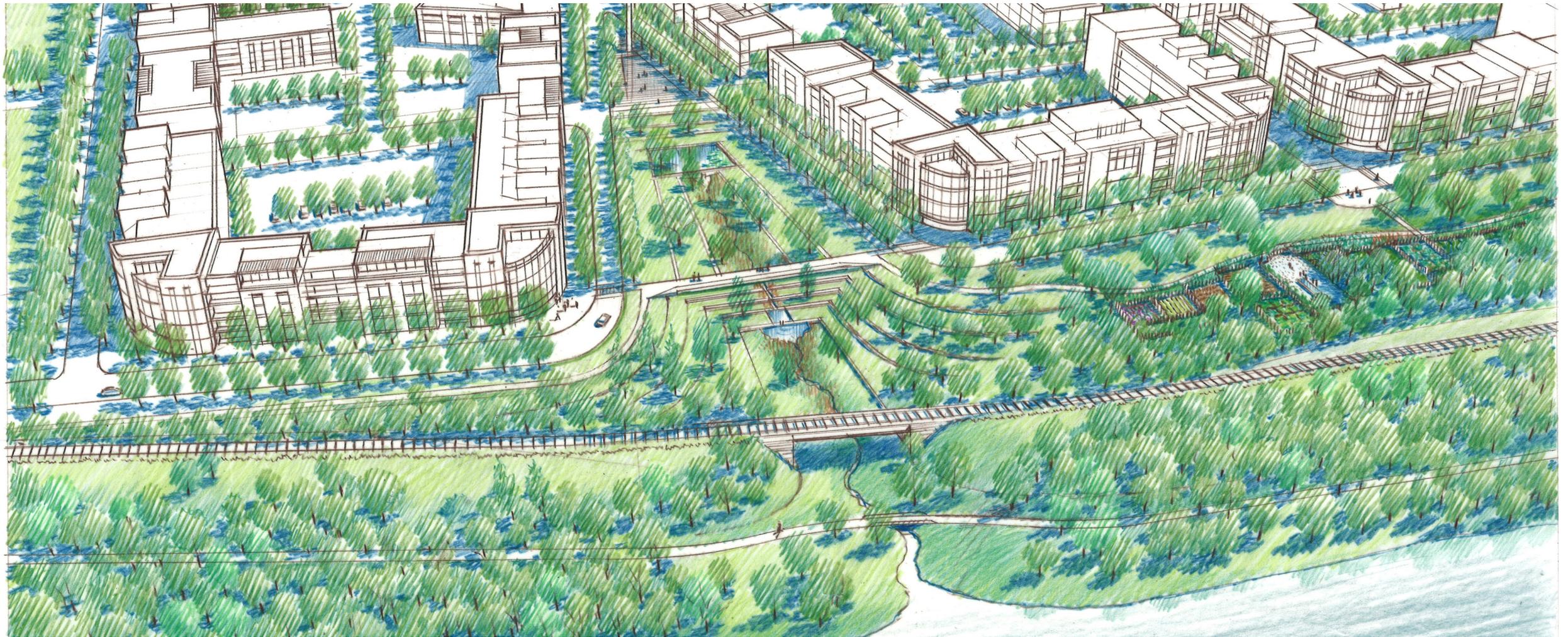


Passive open space leading to the water's edge

Ecological landscape

Passive landscape components

Passive landscape components



J FLOWERS PARK

Common Open Space

Flowers Park is a public place for common use among neighborhood residents and visitors. It will serve as a "front yard" where informal gathering and passive recreation can occur. Flowers Park consists of both passive and active landscapes, as noted in the Landscape Performance Graph, *left*.

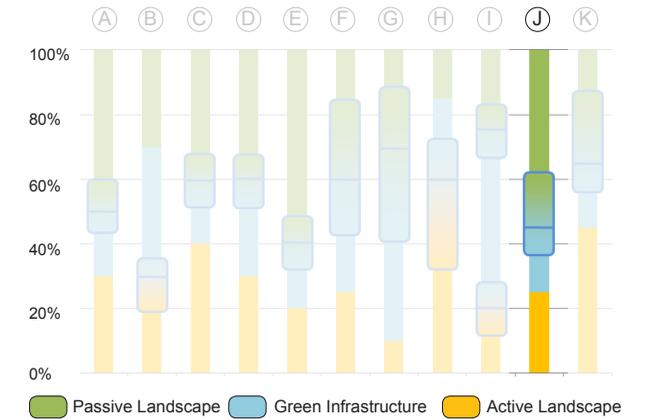
Potential passive components of the landscape include the Green Street of the Signature Boulevard, which will utilize trees and plantings to manage stormwater at its source. Additional green infrastructure may also be

included in the passive landscape by using vegetated swales along the sidewalk or street.

Active landscape components include the dedicated bicycle lane, which runs along the Signature Boulevard through the Hazelwood Flats District adjacent to Flowers Park.

Sections 3.1 and 3.2 discuss Green Infrastructure and Landscape Guidelines more thoroughly.

Landscape Performance Graph



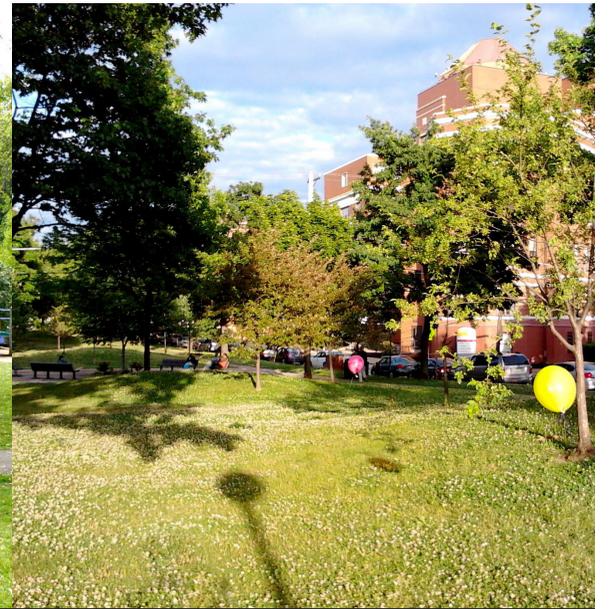
Water feature example



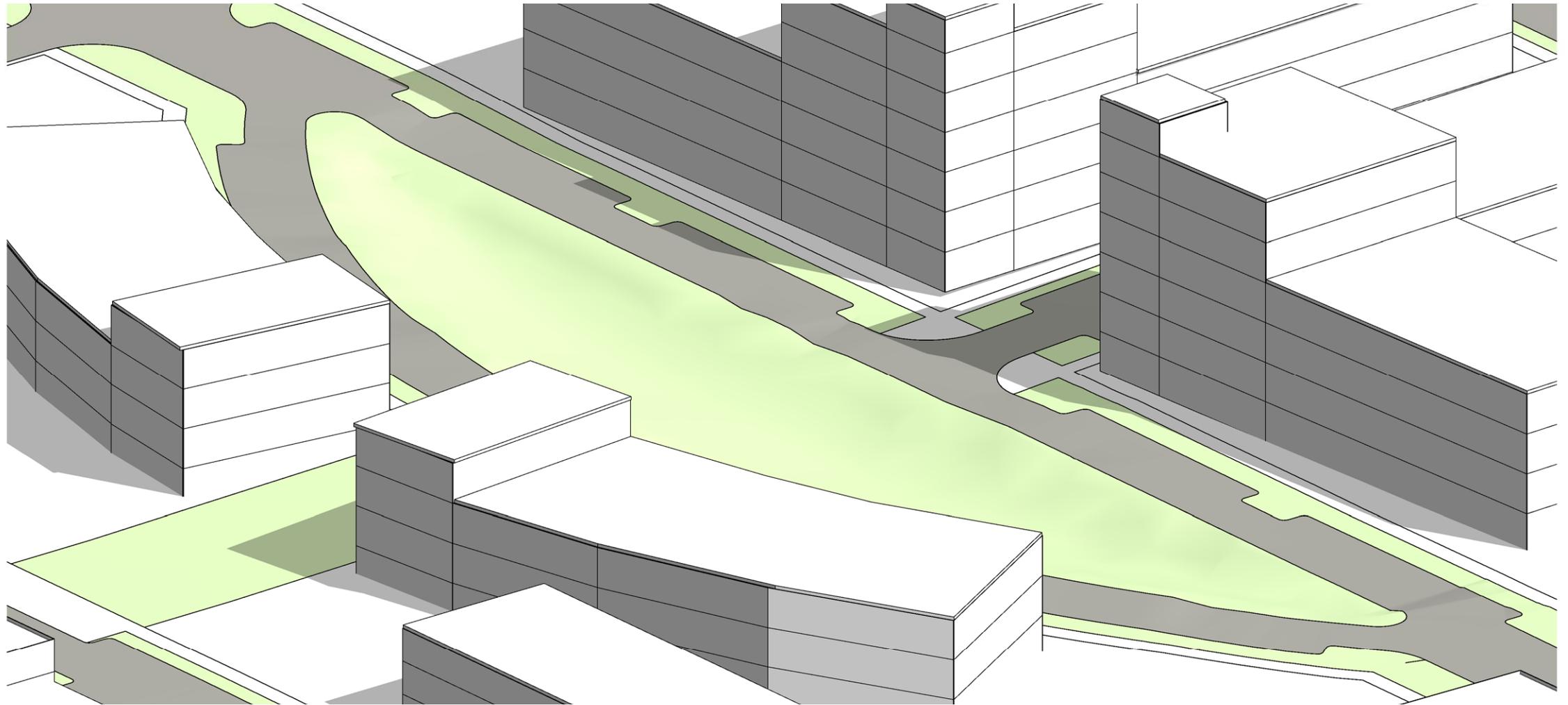
Seating, plantings, and water feature amenities



Playgrounds and passive seating areas



Celebrating in Friendship Park



(K) RIVERFRONT TRAIL

Common Open Space

The Hazelwood Heritage Trail is a continuation of the Three Rivers Heritage Trail, which extends along the riverfront of Pittsburgh's rivers. This public open space accommodates pedestrian and cyclist recreation, providing gathering and resting places as well as through traffic, all while visually connecting trail users to the Monongahela River.

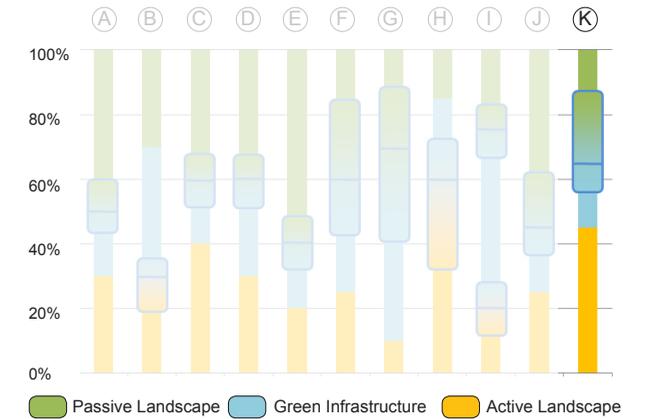
The performance profile of this area, left, describes the intended landscapes of this area, predominantly focused on the active use of the trail. Additional passive

uses and green infrastructure are also incorporated into the intended usage of the area.

Passive landscape includes seating or rest areas along the trail and the vegetation that surrounds them. This vegetation also serves as the green infrastructure component of the area, stabilizing the sloped areas around the trail, and helping to retain and infiltrate stormwater.

Refer to Section 3.1 for information on Green Infrastructure and 3.2 for Landscape Guidelines.

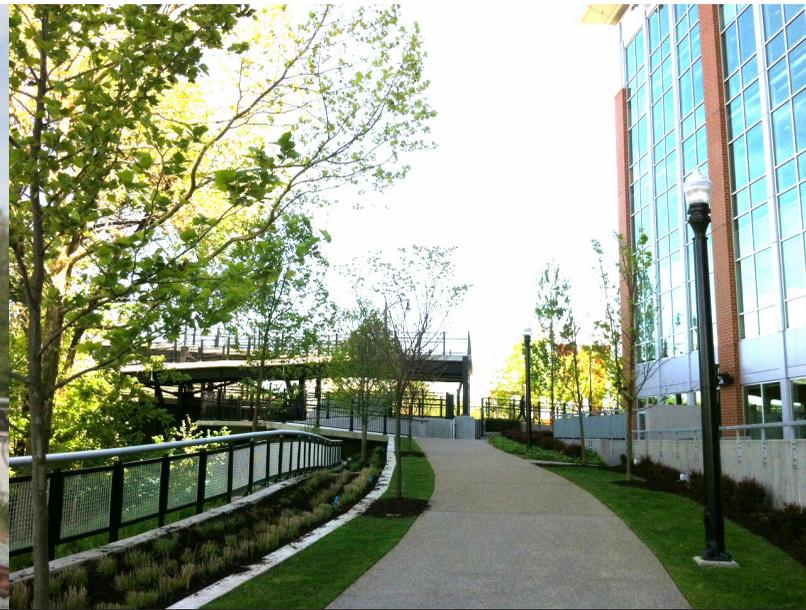
Landscape Performance Graph



Trailhead example



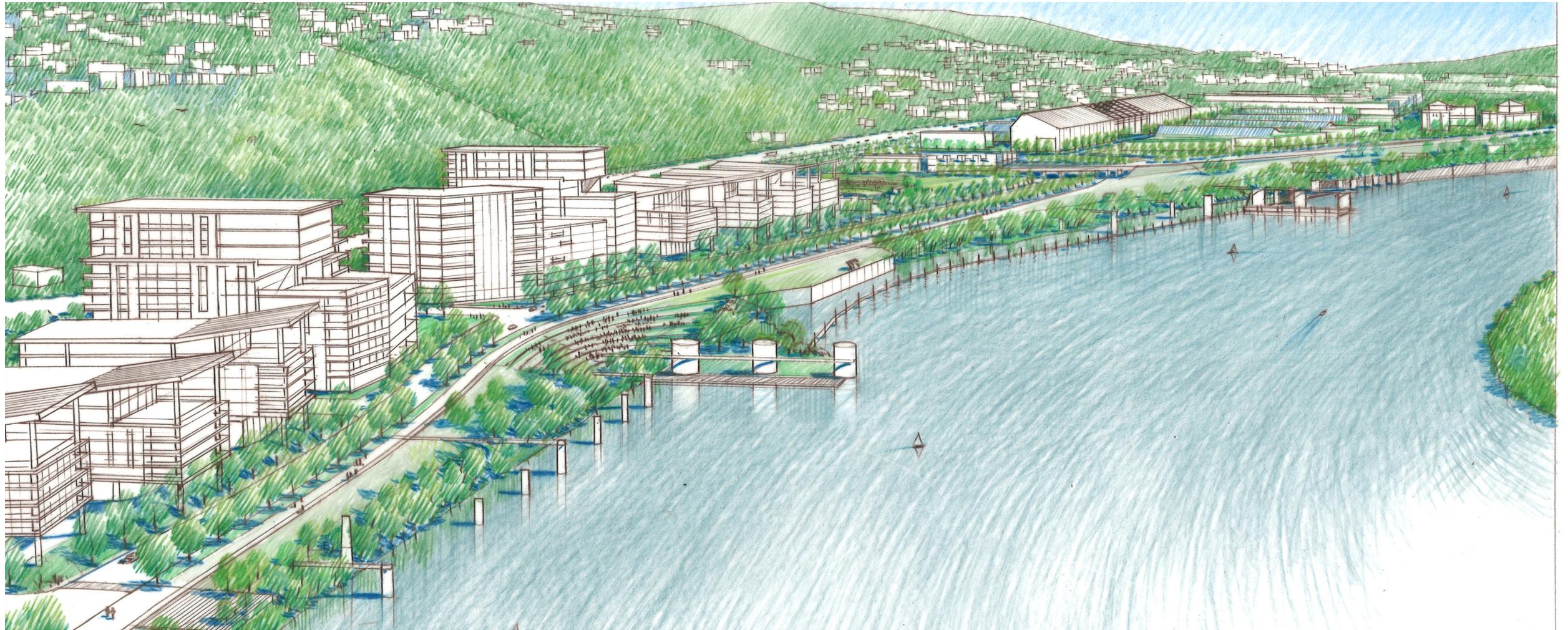
The Docks Riverfront Promenade

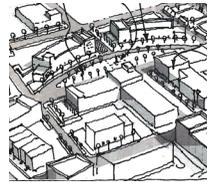


Three Rivers Heritage Trail, South Side Works



Allegheny Riverfront Trail





SECTION 2.3

BUILDING DEVELOPMENT

Meaningful Places	2.3 - 01
How to Use the Guidelines	2.3 - 03
Riverview District	2.3 - 05
Smart Site Central Green District	2.3 - 15
Eco-Tech Park District	2.3 - 23
Hazelwood Flats District	2.3 - 35
Open Space Guidelines	2.3 - 47
Frontages	2.3 - 51
Materials	2.3 - 53
Sample Development Site	2.3 - 55
Definitions	2.3 - 65

DESIGNING FOR MEANINGFUL PLACES

Guiding Building Development

The Almono Building Development Standards provide developers and designers guidance through the process of creating a walkable and mixed-use community.

The conventional approach to land development prioritizes the separation of land uses in a reactive approach intended to prevent inappropriate uses within specific zones. Development in Almono emphasizes place-making qualities that create a meaningful public

realm by addressing the physical form of buildings as a dynamic relationship between land uses and the common space. The result of building fosters a pedestrian-focused built environment that incorporates a mixture of uses and density as the default of development, not the exception.

While the Building Development Standards are based upon the Vision depicted in the Section 1.2 Concept Plan, they are intended to produce a predictable yet

flexible urban form pattern of development where a diverse variety of development uses can evolve based upon market demand.

Accessory structures shall meet the intent of the guidelines but utilize the provision of Zoning Ordinance Section 912. Existing structures undergoing major renovation are intended to comply with the spirit and intent, where feasible.



Building edges that shape the public realm



Building uses define and address a pedestrian street



Schenley Plaza provides the front door to Schenley Park



Apartments over street-level retail on Penn Avenue

Shaping the Public Realm relationship between individual building placement to the rights-of-way lends definition to street edges and corners in creating walkable urban form.

Designing for Pedestrians Standards that encourage pedestrian-oriented activity include prescriptions that define building frontage types and where entrances and sidewalk-level transparencies are located to promote sidewalk activity.

Meaningful Public Spaces public realms shaped through building form and rights-of-way and designed in relationship to its physical and spatial site forces define the "outdoor rooms" of the public realm.

Mixed-Use Districts Horizontal and vertical mixed-use development create walkable and diverse Districts that provide a variety of economic opportunities for residential, commercial, and entertainment development.

Almono Development Districts

The Building Development Guidelines are established for each of the four Almono development districts. The four sections of this chapter address the unique site and building forces that vary across the site from district to district. These site forces influence the building location, design, and use.

Riverview provides high-performance buildings that focus their form and function outward to the river to optimize views and use of the riverfront.

Smart Site Central Green proposes the restoration of the historic roundhouse and the surrounding landscape becomes a destination for studying and promoting the exploration of environmental, water, and energy production.

Eco-Tech Park is an opportunity to lead in re-defining the relationship between applied knowledge, regional economic benefit, environmental reconciliation, energy use & industrial property.

Hazelwood Flats establishes a fully connected “fourth corner” to Hazelwood allows reinvestment to occur on and off-site concurrently.



The blue diagram line defines a **Signature Boulevard** that links four distinct districts across the site. This boulevard provides a regional connection to the river while seamlessly connecting the new development to the adjacent existing neighborhood

HOW TO USE THE GUIDELINES

Components of the Building Development Guidelines

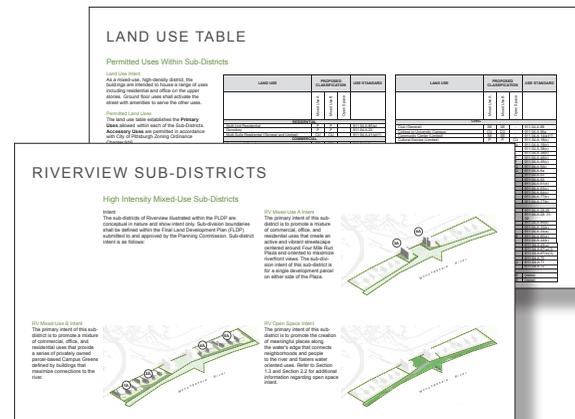
Within each of the four districts, the components identified below work together to guide building form for development across the site.

Vision



This section outlines the intent for district specific place-making principles and in response to the **Location Context**.

Sub-Districts and Land Use



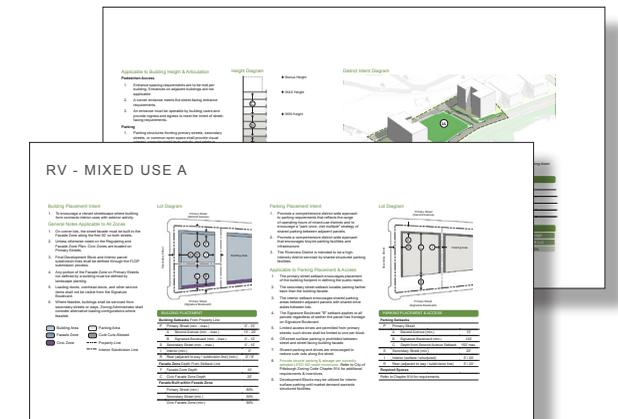
The **Land Use** tables depicts primary land uses permitted in accordance with the City of Pittsburgh Zoning Code and their relationship to **Sub-Districts**.

Regulating Plans and Site Forces



The **Regulating and Facade Zone Plan** depicts district rights-of-way, open space, development blocks, facade zones, and sub-district information; the **Site Forces** diagrams site conditions and intent in regard to the relationship between building orientation and the public realm.

Building and Parking Placement and Regulations



Building and Parking Placement diagrams shape the physical and functional character of the public realm by establishing parameters governing building height, form, and articulation as well as providing requirements for on-parcel parking that encourages a pedestrian oriented environment. These regulations are separated by sub-district.

Regulations in **green** text denote LEED ND reference standards.

Components of the Building Development Guidelines

The components identified below are applicable to all districts and can be found at the end of the Building Development Guidelines.

Open Space



OPEN SPACE GUIDELINES

Describing the Open Space and Riverfront Locations

Buildings and structures enclose open space, provide enclosure and shelter, accommodate parking, events, and recreation that occur in open space.

These guidelines are related to plan parameters as building and structure forms open space and are applicable to Districts, Smart Side Center, and East Tech Park Districts. Development may occur within these different open space types and should take water, wetlands, and other natural resources into account.

Define Open Space: Common buildings, recreational amenities, restaurants, and other uses should be located to define a neighborhood identity by providing open space and public gathering opportunities. The building form should be designed to encourage the use of open space through its location, adjacent to passive open space by providing open space and public gathering.

Provide open space around each site include structure and facilities such as all service restaurants, food and retail shops, bicycle, recreation facilities, and recreational facilities that are both and required and encouraged.

Water wetlands and other natural resources should be located within building footprints and throughout the development to provide a sense of place and identity. The open space and the location of building materials and other built environment elements to building should be designed in a district, and building, and consistent with other guidelines.

Open space and water wetlands development should be located within building footprints and throughout the development to provide a sense of place and identity. The open space and the location of building materials and other built environment elements to building should be designed in a district, and building, and consistent with other guidelines.

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Open Space depicts development regulations for Parcel Open Space.

Frontages



FRONTAGES

How buildings connect to and activate the public realm

These standards support and supplement the standards established within the Regulations and Facade Zone Plan and the Building Activation Standards.

Landscaping design and character is a key component of Facade Zone Plan and is intended to be a design for information and requirements.

How buildings connect to and activate the public realm

These standards support and supplement the standards established within the Regulations and Facade Zone Plan and the Building Activation Standards.

Landscaping design and character is a key component of Facade Zone Plan and is intended to be a design for information and requirements.

How buildings connect to and activate the public realm

These standards support and supplement the standards established within the Regulations and Facade Zone Plan and the Building Activation Standards.

Landscaping design and character is a key component of Facade Zone Plan and is intended to be a design for information and requirements.

Frontages establish how buildings should meet the street.

Materials



ALMONO BUILDING MATERIALS

Creating a Cohesive Character Across Districts

The selection and application of building materials are intended to create a cohesive character across the site and to activate the public realm.

Building Activation Standards

All building materials are subject to design review by the site development department designed by a professional architect or interior design professional. If not compatible with the neighborhood context, the materials shall be replaced with materials that are compatible with the neighborhood context.

Smart Side Center Green District

Building materials shall be high quality, durable, and weather-resistant. Building materials shall be selected to complement the architectural style and character of the district.

East Tech Park District

Building materials shall be high quality, durable, and weather-resistant. Building materials shall be selected to complement the architectural style and character of the district.

Headwaters Park District

Building materials shall be high quality, durable, and weather-resistant. Building materials shall be selected to complement the architectural style and character of the district.

Smart Side Center Green District

Building materials shall be high quality, durable, and weather-resistant. Building materials shall be selected to complement the architectural style and character of the district.

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Headwaters Park District

Building materials shall be high quality, durable, and weather-resistant. Building materials shall be selected to complement the architectural style and character of the district.

Building Materials establish a cohesive character and hierarchy of permitted building materials across the site.

Definitions



DEFINITIONS

Almono Building Development Definitions

These definitions are intended to provide clarity and consistency in the use of terminology throughout the Building Development Guidelines.

Facade Zone, Civic

The area of a building facade that is subject to the requirements of the Facade Zone Plan and the Building Activation Standards.

Other

Facade height and other standards that provide relief from the requirements of the Facade Zone Plan and the Building Activation Standards.

Site Fences

The materials, colors, and physical conditions that provide a sense of enclosure and security to the site.

Private, Primary and Secondary

Facade height and other standards that provide relief from the requirements of the Facade Zone Plan and the Building Activation Standards.

Development Block

The area of a building facade that is subject to the requirements of the Facade Zone Plan and the Building Activation Standards.

Block Wall

The vertical surface of a building that faces a street, street space, and/or the public realm.

Expansion Line

The vertical surface of a building that faces a street, street space, and/or the public realm.

Building Materials

The materials, colors, and physical conditions that provide a sense of enclosure and security to the site.

Frontages

The materials, colors, and physical conditions that provide a sense of enclosure and security to the site.

Open Space

The area of a building facade that is subject to the requirements of the Facade Zone Plan and the Building Activation Standards.

Smart Side Center Green District

The area of a building facade that is subject to the requirements of the Facade Zone Plan and the Building Activation Standards.

East Tech Park District

The area of a building facade that is subject to the requirements of the Facade Zone Plan and the Building Activation Standards.

Headwaters Park District

The area of a building facade that is subject to the requirements of the Facade Zone Plan and the Building Activation Standards.

Definitions describe terminology used throughout the Building Development Guidelines and are additive to Chapter 926 of the City of Pittsburgh Zoning Code.

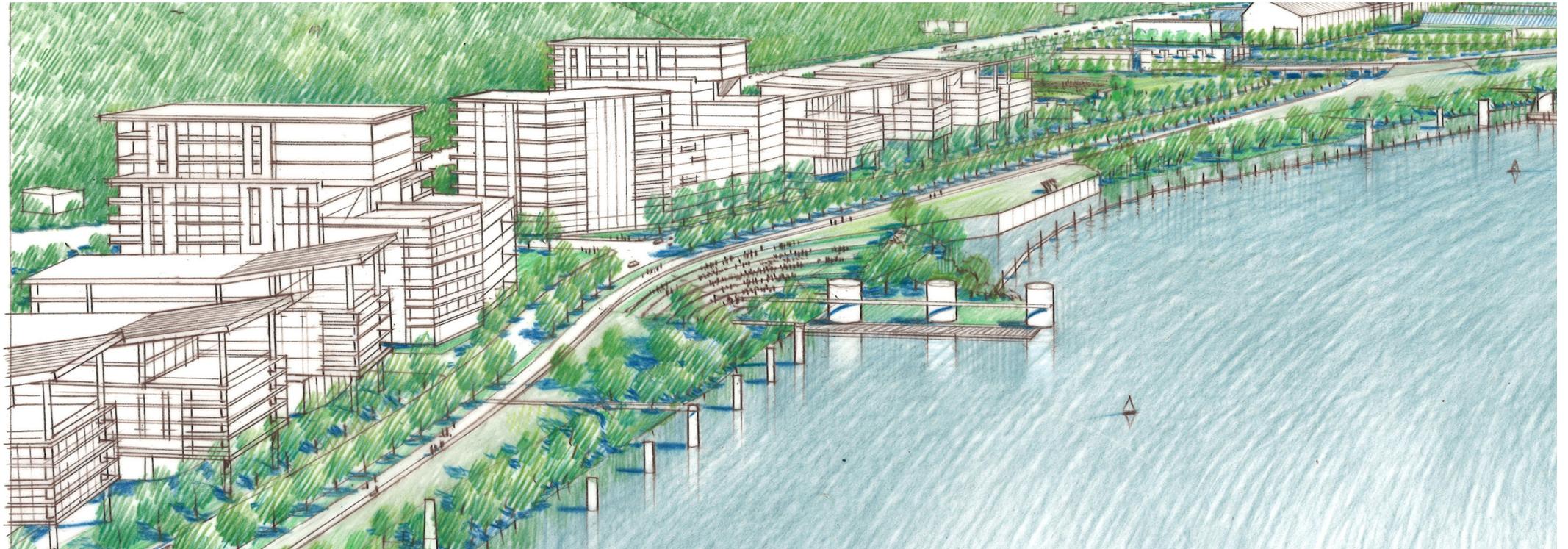
RIVERVIEW DISTRICT

Connecting to the River

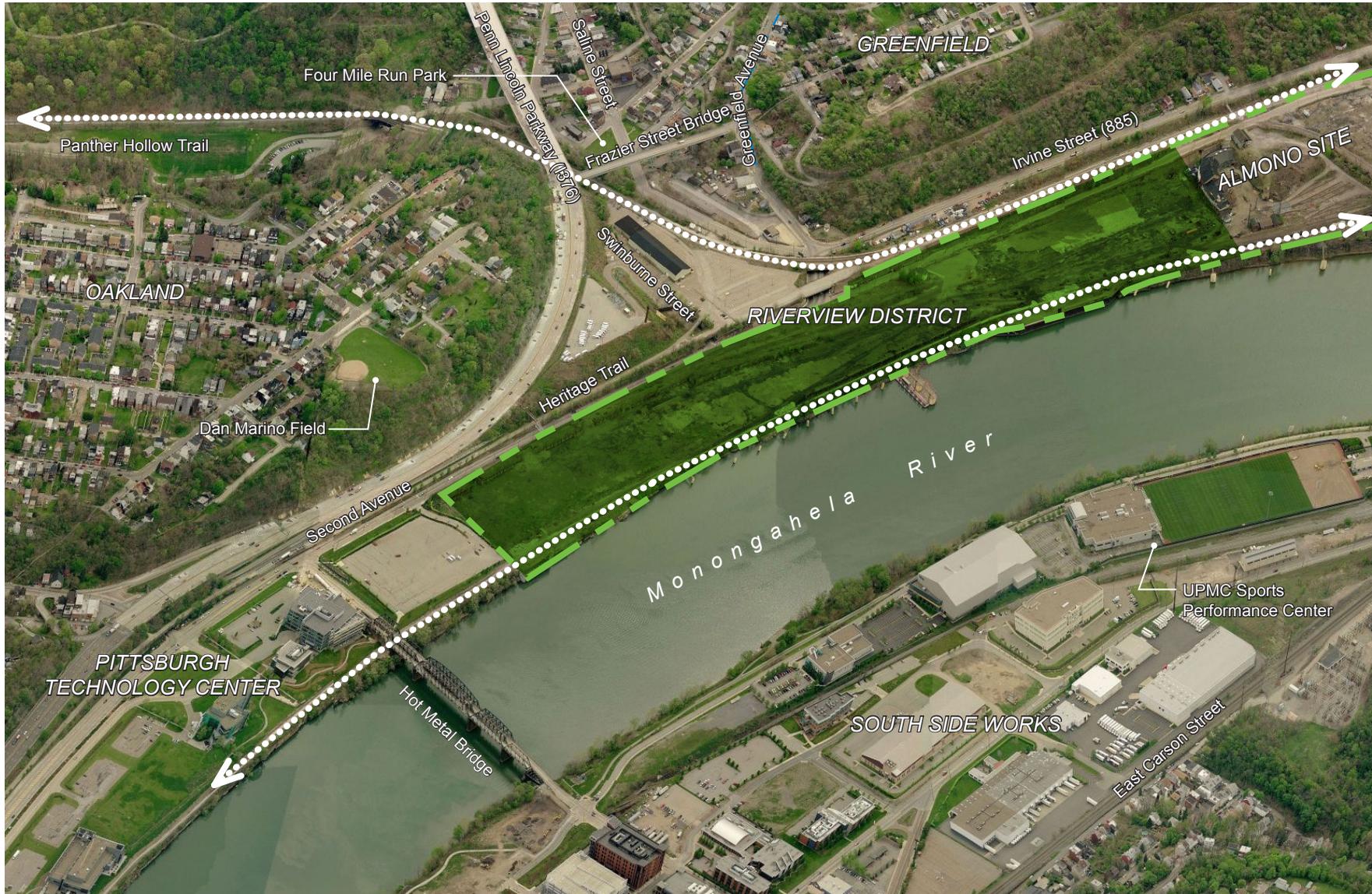
Riverview establishes a thriving mixed-use environment where education and innovation harmonize with natural systems. High-performance buildings focus their forms and functions outward to the river to maximize "frontage" value of the riverfront. Multiple "breaks" in buildings and connections between the Signature Boulevard and Second Avenue serve to open up a regular rhythm of views to the river.

The **Economic**, **Social**, and **Physical** framework for Riverview consists of:

- E** The industries and markets of Oakland and Downtown are extended to the site through dense development, with connections to the Hot Metal Bridge, Pittsburgh Technology Center, and the upland East End Neighborhoods.
- S** This site provides a regional riverfront destination with the development of the Signature Boulevard and adjacent park space that establishes a place for people to gather and enjoy the river's edge.
- P** The riverfront connection is maximized through building form, articulation, and placement that creates a distinct character for the district.



LOCATION CONTEXT



Existing river structures Riverfront Park at South Side Works



Traffic node at Second Avenue



View of Hot Metal Bridge and Pittsburgh Technology Center from site

RIVERVIEW SUB-DISTRICTS

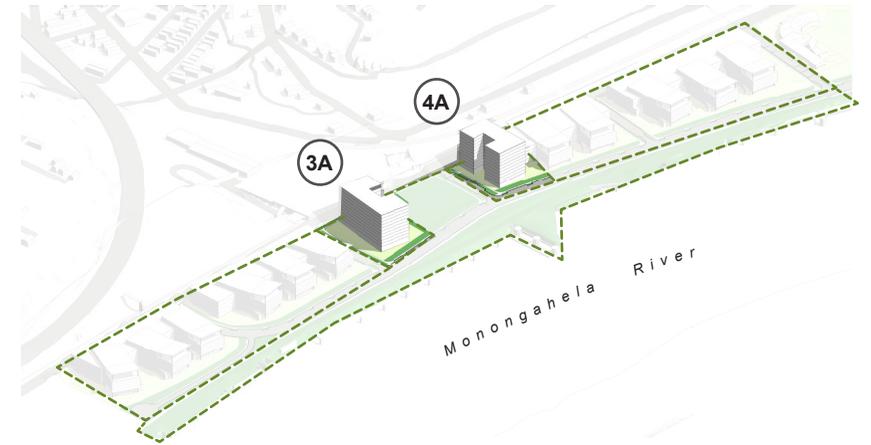
High Intensity Mixed-Use Sub-Districts

Intent

The sub-districts of Riverview illustrated within the PLDP are conceptual in nature and show intent only. Sub-division boundaries shall be defined within the Final Land Development Plan (FLDP) submitted to and approved by the Planning Commission. Sub-district intent is as follows:

RV Mixed-Use A Intent

The primary intent of this sub-district is to promote a mixture of commercial, office, and residential uses that create an active and vibrant streetscape centered around Four Mile Run Plaza and oriented to maximize riverfront views. The sub-division intent of this sub-district is for a single development parcel on either side of the Plaza.



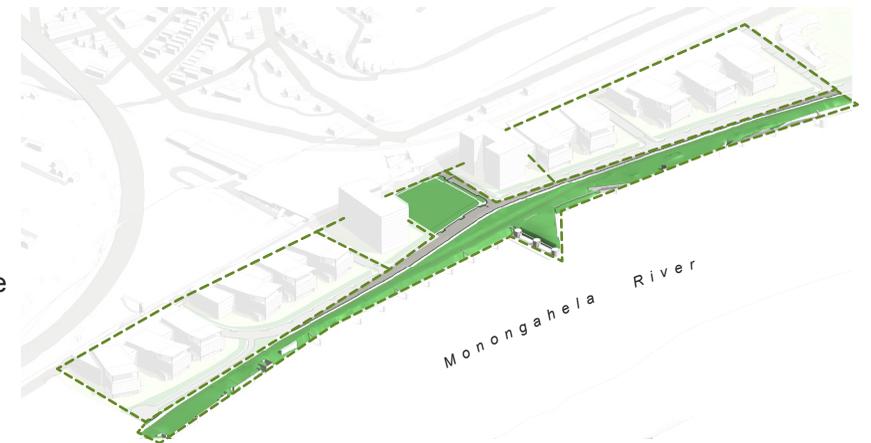
RV Mixed-Use B Intent

The primary intent of this sub-district is to promote a mixture of commercial, office, and residential uses that provide a series of privately owned parcel-based Campus Greens defined by buildings that maximize connections to the river.



RV Open Space Intent

The primary intent of this sub-district is to promote the creation of meaningful places along the water's edge that connects neighborhoods and people to the river and fosters water oriented uses. Refer to Section 1.3 and Section 2.2 for additional information regarding open space intent.



LAND USE TABLE

Permitted Uses Within Sub-Districts

Land Use Intent

As a mixed-use, high-density district, the buildings are intended to house a range of uses including residential and office on the upper stories. Ground floor uses shall activate the street with amenities to serve the other uses.

Permitted Land Uses

The land use table establishes the **Primary Uses** allowed within each of the Sub-Districts. **Accessory Uses** are permitted in accordance with City of Pittsburgh Zoning Ordinance Chapter 916.

Notes

1. Existing Barge Staging to remain on site. Barge Staging is defined as the making up, breaking down, or staging of barge tows for the purpose of transportation and shoring of goods pursuant to permit issued by the United States Army Corps of Engineers.

2. The mix of land use types is based on the initial master plan vision. Actual use quantities and percentages will be defined through the FLDP process.

Land Use Type	Gross Square Footage
Residential	420,600
Mixed-Use	1,986,000
Total	2,406,600

P = PERMITTED BY RIGHT
 AE = ADMINISTRATOR EXCEPTION
 SE = SPECIAL EXCEPTION
 CU = CONDITIONAL USE

USES NOT LISTED AND BOXES WITH NO DESIGNATION SIGNIFY PROHIBITED USES

LAND USE	PROPOSED CLASSIFICATION			USE STANDARD
	Mixed Use A	Mixed Use B	Open Space	
RESIDENTIAL				
Multi-Unit Residential	P	P	-	911.04.A.85(a)
Dormitory	P	P	-	911.04.A.23
Multi-Suite Residential (General and Limited)	CU	CU	-	911.04.A.41(a)(1)
COMMERCIAL				
Amusement Arcade	SE	SE	-	911.04.A.3
Art or Music Studio	P	P	-	(None)
Bank or Financial Institution (Limited)	P	P	-	911.04.A.96
Bank or Financial Institution (General)	P	P	-	911.04.A.96
Child Care (Limited)	P	P	-	911.04.A.12(a)
Child Care (General)	P	P	-	911.04.A.12(a)
Educational Classroom Space (Limited)	AE	AE	-	911.04.A.20(a)
Educational Classroom Space (General)	AE	AE	-	911.04.A.21(a)
Grocery Store (Limited)	SE	SE	-	911.04.A.82(a)
Outdoor Retail Sales and Services	P	P	AE	911.04.A.91
Recreation and Entertainment, Indoor (Limited)	P	P	CU	911.04.A.48(a)
Recreation and Entertainment, Indoor (General)	SE	SE	CU	911.04.A.47(d)
Recreation and Entertainment, Outdoor (Limited)	AE	SE	CU	911.04.A.49(a)
Recreation and Entertainment, Outdoor (General)	CU	SE	CU	911.04.A.50(a)
Restaurant (Limited)	P	P	CU	911.04.A.56(c)
Restaurant (General)	P	P	CU	911.04.A.57(a)
Retail Sales and Services (Limited)	P	P	-	911.04.A.58
Retail Sales and Services (General)	P	P	-	911.04.A.59(b)
Retail Sales and Services, Residential Convenience	P	P	-	911.04.A.60
Sidewalk Café	P	P	AE	911.04.A.68
OFFICE				
Laboratory/Research Services	SE	SE	-	911.04.A.37(a)
Medical Office/Clinic (Limited)	P	P	-	911.04.A.81(3)
Medical Office/Clinic (General)	P	P	-	911.04.A.81(3)
Office (Limited)	P	P	-	911.04.A.42(a)
Office (General)	P	P	-	911.04.A.43(a)

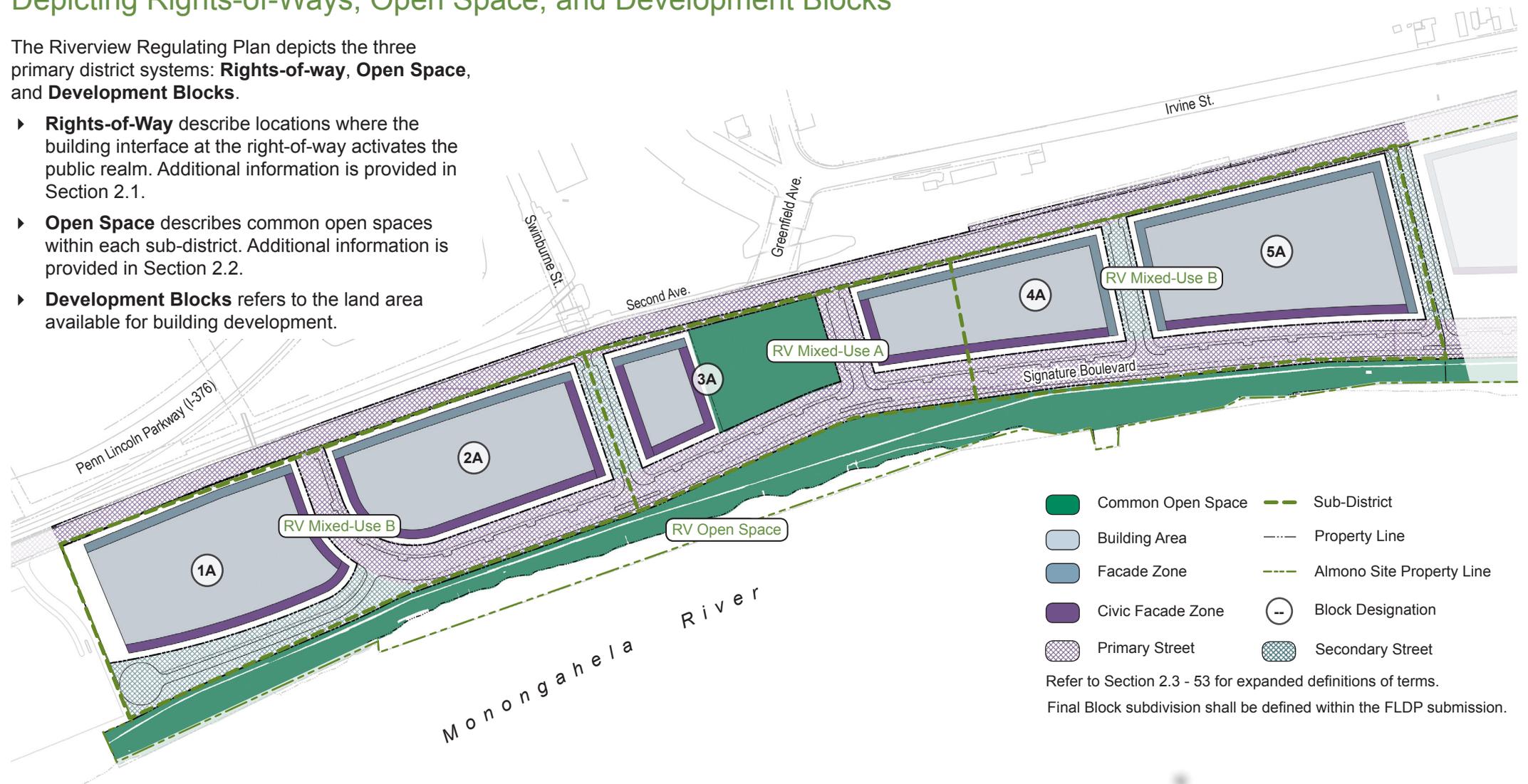
LAND USE	PROPOSED CLASSIFICATION			USE STANDARD
	Mixed Use A	Mixed Use B	Open Space	
CIVIC				
Club (General)	SE	SE	-	911.04.A.88
College or University Campus	CU	CU	-	911.04.A.90a
Community Center (Limited)	SE	SE	-	911.04.A.14(a)(1)
Cultural Service (Limited)	P	P	CU	911.04.A.18(c)
Cultural Service (General)	P	P	CU	911.04.A.19(c)
Library (Limited)	CU	CU	-	911.04.A.38(c)
Library (General)	CU	CU	-	911.04.A.38(c)
Parks and Recreation (Limited)	AE	AE	P	911.04.A.46(c)
Parks and Recreation (General)	AE	AE	P	911.04.A.46(c)
Public Assembly (Limited)	CU	CU	CU	911.04.A.5(b)
Public Assembly (General)	CU	CU	CU	911.04.A.6a
Religious Assembly (Limited)	SE	SE	-	911.04.A.53
Religious Assembly (General)	SE	SE	-	911.04.A.53
Safety Service	SE	SE	-	911.04.A.61(d)
School, Elementary or Secondary (Limited)	CU	CU	-	911.04.A.63(c)
School, Elementary or Secondary (General)	CU	CU	-	911.04.A.64(c)
Vocational School (Limited)	SE	SE	-	911.04.A.77(b)
Vocational School (General)	CU	CU	-	911.04.A.77(b)
MISCELLANEOUS				
Helicopter Landing (Helipad and Heliport)	CU	CU	-	911.04.A.28-29
Helistop	CU	CU	-	911.04.A.28; 31-32
Hospital	CU	CU	-	911.04.A.89(b)
Hotel/Motel (Limited)	P	P	-	911.04.A.33(b)
Hotel/Motel (General)	P	P	-	911.04.A.34(a)
Nursery, Retail (Limited)	-	-	SE	911.04.A.80(d)
Parking, Commercial (Limited)	P	P	-	911.04.A.44(b)
Parking, Commercial (General)	P	P	-	911.04.A.45(a)
Parking Structure (Limited)	P	P	-	911.04.A.87(a)(3)
Parking Structure (General)	P	P	-	911.04.A.87(b)(3)
Transit Facility	SE	SE	-	911.04.A.70
Utility (Limited)	SE	SE	CU	911.04.A.71
Utility (General)	SE	SE	-	911.04.A.72
RIVER ORIENTED USES				
Barge Staging	-	-	SE	(none)
River to Rail Transfer	-	SE	SE	(none)

REGULATING & FACADE ZONE PLAN

Depicting Rights-of-Ways, Open Space, and Development Blocks

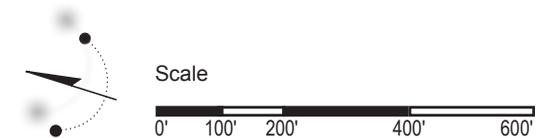
The Riverview Regulating Plan depicts the three primary district systems: **Rights-of-way**, **Open Space**, and **Development Blocks**.

- ▶ **Rights-of-Way** describe locations where the building interface at the right-of-way activates the public realm. Additional information is provided in Section 2.1.
- ▶ **Open Space** describes common open spaces within each sub-district. Additional information is provided in Section 2.2.
- ▶ **Development Blocks** refers to the land area available for building development.



- Common Open Space
- Building Area
- Facade Zone
- Civic Facade Zone
- Primary Street
- Secondary Street
- Sub-District
- Property Line
- Almono Site Property Line
- Block Designation
- Block Designation

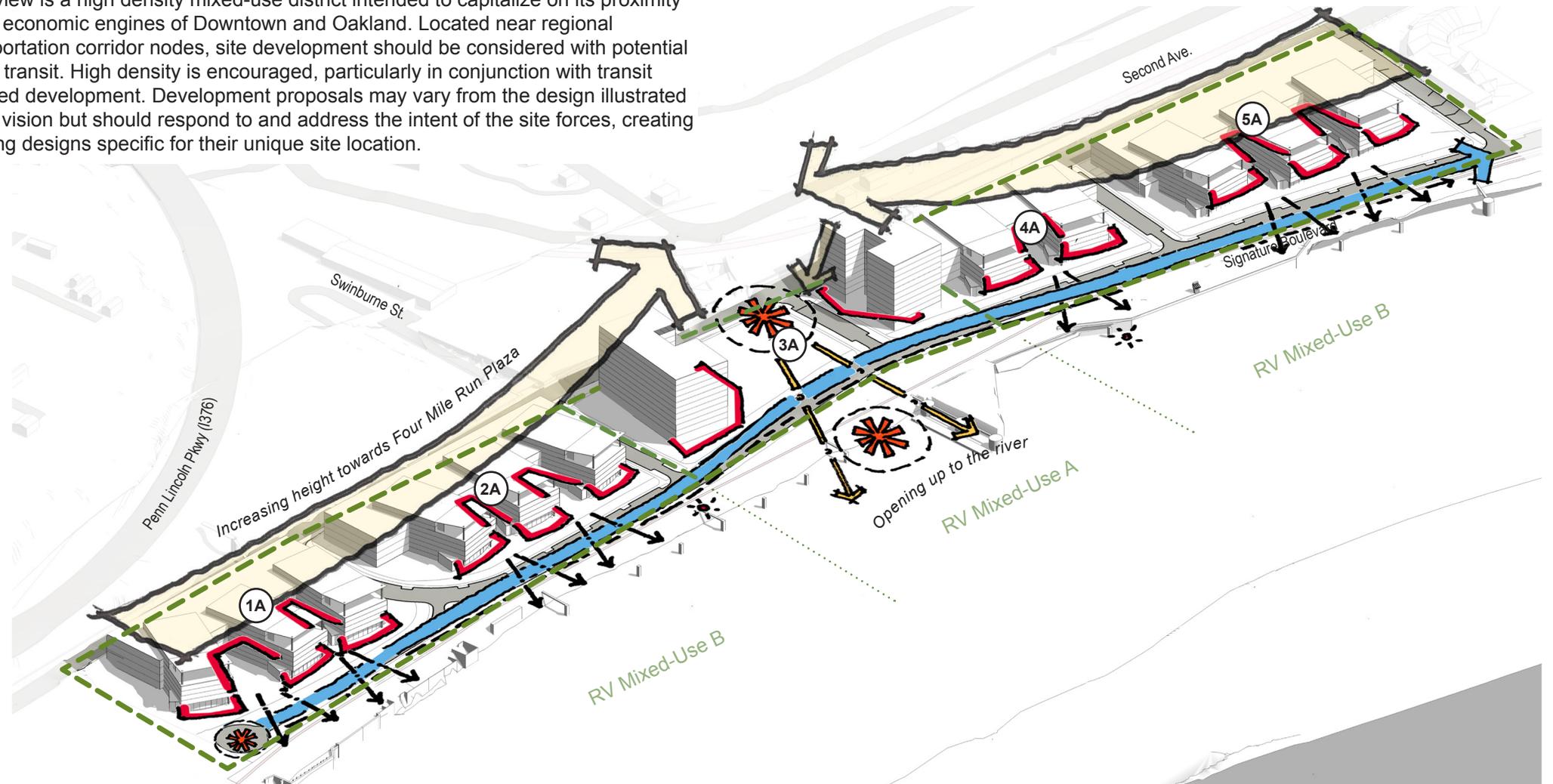
Refer to Section 2.3 - 53 for expanded definitions of terms.
Final Block subdivision shall be defined within the FLDP submission.



SITE FORCES

A High Density Mixed Use District Orienting Toward the River

Riverview is a high density mixed-use district intended to capitalize on its proximity to the economic engines of Downtown and Oakland. Located near regional transportation corridor nodes, site development should be considered with potential future transit. High density is encouraged, particularly in conjunction with transit oriented development. Development proposals may vary from the design illustrated in the vision but should respond to and address the intent of the site forces, creating building designs specific for their unique site location.



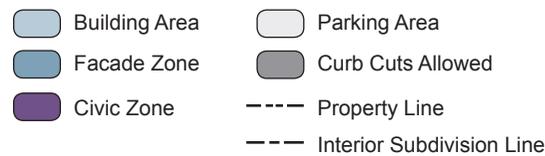
RV - MIXED USE A

Building Placement Intent

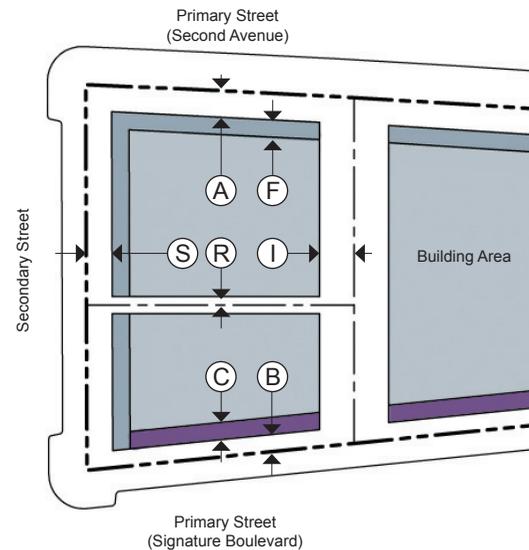
- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from the Signature Boulevard.
- Where feasible, buildings shall be serviced from secondary streets or ways. Zoning Administrator shall consider alternative loading configurations where feasible.



Lot Diagram



BUILDING PLACEMENT

Building Setbacks From Property Line		
P	Primary Street (min. - max.)	0' - 10'
A	Second Avenue (min. - max.)	10' - 20'
B	Signature Boulevard (min. - max.)	0' - 10'
S	Secondary Street (min. - max.)	0' - 10'
I	Interior (min.)	0'
R	Rear (adjacent to way / subdivision line) (min.)	0' / 6'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	25'
Facade Built within Facade Zone		
	Primary Street (min.)	80%
	Secondary Street (min.)	50%
	Civic Facade Zone (min.)	90%

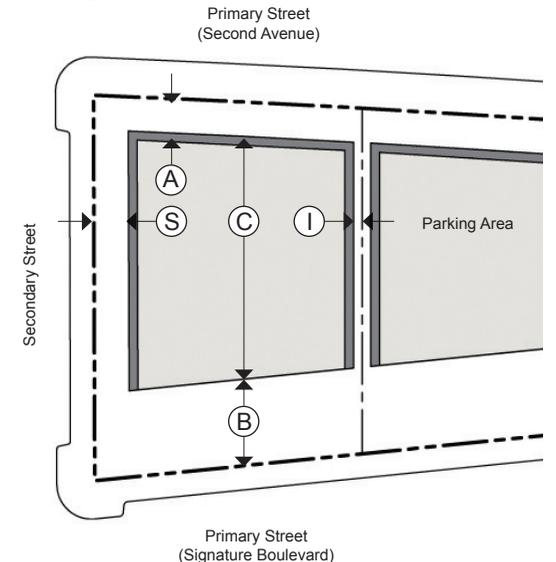
Parking Placement Intent

- Promote a comprehensive district-wide approach to parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of shared parking between adjacent parcels.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.
- The Riverview District is intended to be a high-intensity district serviced by shared structured parking facilities.

Applicable to Parking Placement & Access

- The primary street setback encourages placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The interior setback encourages shared parking areas between adjacent parcels with shared drive aisles between lots.
- The Signature Boulevard "B" setback applies to all parcels regardless of whether the parcel has frontage on Signature Boulevard.
- Limited access drives are permitted from primary streets; such drives shall be limited to one per block.
- Off-street surface parking is prohibited between street and street facing building facade.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



PARKING PLACEMENT & ACCESS

Parking Setbacks		
P	Primary Street	
A	Second Avenue (min.)	10'
B	Signature Boulevard (min.)	100'
C	Depth from Second Avenue Setback	150' max.
S	Secondary Street (min.)	20'
I	Interior (surface / structured)	5' / 20'
R	Rear (adjacent to way / subdivision line)	5' / 20'
Required Spaces		
Refer to Chapter 914 for requirements.		

Applicable to Building Height & Articulation

Pedestrian Access

1. Entrance spacing requirements are to be met per building. Entrances on adjacent buildings are not applicable.
2. A corner entrance meets the street-facing entrance requirements.
3. An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

Parking

1. Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

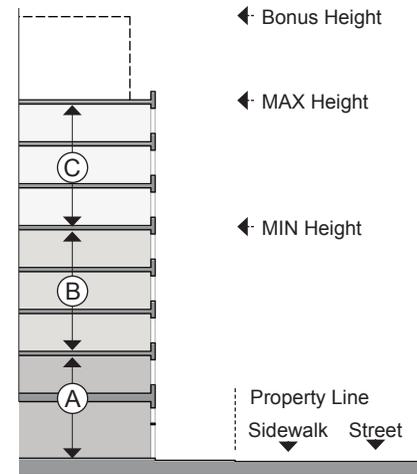
Incentives

1. Height bonus permitted for **LEED-Silver minimum certified buildings** subject to 915.04.F
2. A height bonus is available for developments including a minimum of 15% Affordable Housing. Developers are responsible to provide sufficient documentation, determined by the Zoning Administrator, as binding evidence of compliance with the parameters of affordable housing in order to receive the density bonus.

Affordable Housing as defined and amended by the Department of Housing and Urban Development provides rental units for households that cost no more than 30% of its annual income. Affordable for sale housing will have an initial purchase price that does not exceed 95% of the median purchase price for the area as determined by the Secretary of HUD.

3. Lot coverage increase permitted for structured parking. Structures shall comply with setback guidelines.

Height Diagram



District Intent Diagram



RV - Mixed Use A sub-district buildings should respond to diagrammed site forces that define Four Mile Run Plaza: increasing height toward the plaza, opening up to the river, and stepping down towards the plaza. The Zone heights may be indicated by expression lines on the building facade.

BUILDING HEIGHT & ARTICULATION

Building Height		
Building Height (min.)		5 stories
Building Height (max.)		10 stories
Building Height (bonus)		2 additional stories
Story Height		
Ground Floor Elevation (min. - max.)		0" - 30"
A	Ground Zone Height	1/3 height
B	Middle Zone Height	1/3 height
C	Upper Zone Height	1/3 height
Building Form		
Street-Facing Wall Length w/o Offset (max.)		100'
Street-Facing Wall Offset Depth (min.)		4'
Street-Facing Wall Offset Length (min.)		10'

Transparency (Clear glass facades)	
River and Open Space Facing / Secondary Street (min.)	
Ground Zone	60% / 40%
Middle Zone	40% / 30%
Upper Zone	30% / 20%
Non-Residential, between 3 and 8 feet above grade	60% / 30%
Blank Wall Area, Primary (max) / Secondary Street (max)	35' / 45'
Pedestrian Access and Distance Between Entries	
Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'

FRONTAGES

Permitted Frontage Types	
Common Landscape	
Terrace	
Forecourt	
Commercial / Shopfront	

COVERAGE

#	Block	Coverage
	Acreage	Block & Lot
3A	2.6	70-90%

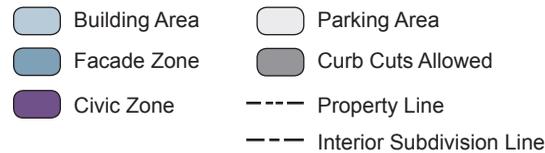
RV - MIXED USE B

Building Placement Intent

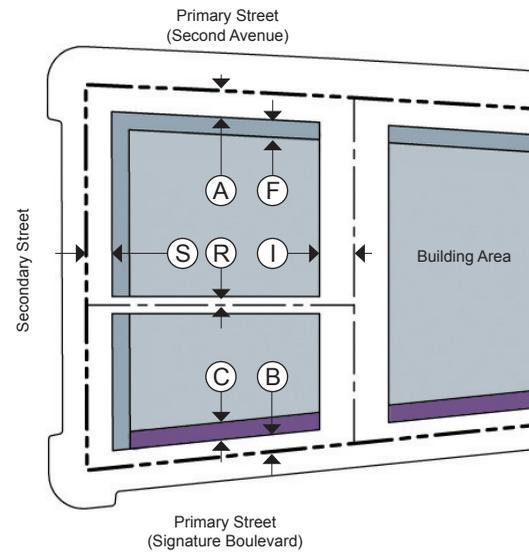
- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.
- The interior building setback is intended to provide area for Riverview Campus Green Areas. Refer to Section 2.2.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from the Signature Boulevard.
- Where feasible, buildings shall be serviced from secondary streets or ways. Zoning Administrator shall consider alternative loading configurations where feasible.



Lot Diagram



BUILDING PLACEMENT

Building Setbacks From Property Line		
P	Primary Street (min. - max.)	0' - 10'
A	Second Avenue (min. - max.)	10' - 20'
B	Signature Boulevard (min. - max.)	0' - 10'
S	Secondary Street (min. - max.)	0' - 10'
I	Interior (min.)	40'
R	Rear (adjacent to way / subdivision line) (min.)	0' / 6'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	25'
Facade Built within Facade Zone		
	Primary Street (min.)	80%
	Secondary Street (min.)	50%
	Civic Facade Zone (min. - max.)	60-65%

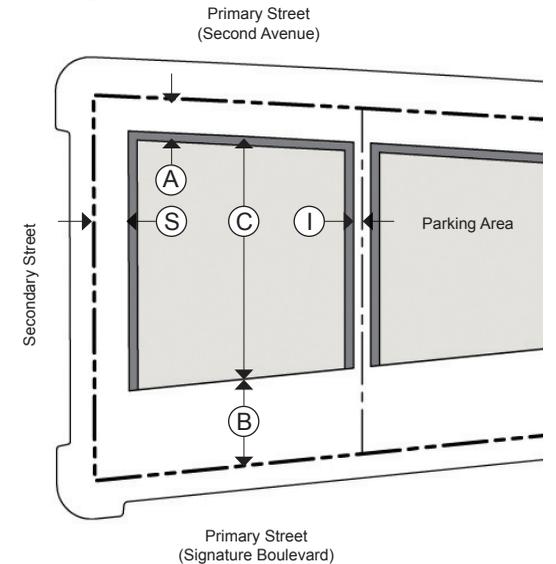
Parking Placement Intent

- To promote a comprehensive district-wide approach to parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of shared parking between adjacent parcels.
- To promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.
- The Riverview District is intended to be a high-intensity district serviced by structured parking facilities.

Applicable to Parking Placement & Access

- The primary street setback encourages placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The interior setback encourages shared parking areas between adjacent parcels with shared drive aisles between lots.
- The Signature Boulevard "B" setback applies to all parcels regardless whether the parcel has frontage on Signature Boulevard.
- Limited access drives are permitted from primary streets; such drives shall be limited to one per block.
- Off-street surface parking is prohibited between street and building facade.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



PARKING PLACEMENT & ACCESS

Parking Setbacks		
P	Primary Street	
A	Second Avenue (min.)	10'
B	Signature Boulevard (min.)	100'
C	Depth from Second Avenue Setback	150' max.
S	Secondary Street (min.)	20'
I	Interior (surface / structured)	5' / 20'
R	Rear (adjacent to way / subdivision line)	0' / 20'
Required Spaces		
Refer to Chapter 914 for additional requirements.		

Applicable to Building Height & Articulation

Pedestrian Access

1. Entrance spacing requirements are to be met per building. Entrances on adjacent buildings are not applicable.
2. A corner entrance meets the street-facing entrance requirements.
3. An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

Parking

1. Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

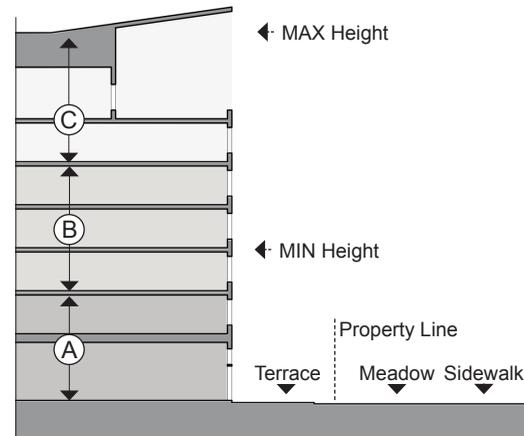
Incentives

1. Height bonus permitted for LEED-Silver minimum certified buildings subject to 915.04.F.
2. A height bonus is available for developments including a minimum of 15% Affordable Housing. Developers are responsible to provide sufficient documentation, determined by the Zoning Administrator, as binding evidence of compliance with the parameters of affordable housing in order to receive the density bonus.

Affordable Housing as defined and amended by the Department of Housing and Urban Development provides rental units for households that cost no more than 30% of its annual income. Affordable for sale housing will have an initial purchase price that does not exceed 95% of the median purchase price for the area as determined by the Secretary of HUD.

3. Lot coverage increase permitted for structured parking. Structures shall comply with setback guidelines.

Height Diagram



District Intent Diagram



RV - Mixed Use B sub-district buildings are divided into three zones: the Ground Zone intended to activate the street with public and private programming; the Middle Zone intended to define the building facade edge; and the Upper Zone intended to provide views towards the riverfront. Zone transitions may be indicated by expression lines on the building facade.

BUILDING HEIGHT & ARTICULATION

Building Height	
Building Height (min.)	3 stories
Building Height (max.)	7 stories
Building Height (bonus)	1 additional story

Story Height	
Ground Floor facing Meadow Elevation (min. - max.)	0" - 30"
A Ground Zone Height	1/4 height
B Middle Zone Height	1/2 height
C Upper Zone Height	1/4 height

Building Form	
Street-Facing Wall Length w/o Offset (max.)	100'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	10'

Transparency (Clear glass facades)

River and Campus Green Facing / Secondary Street (min.)	
Ground Zone	60% / 30%
Middle Zone	30% / 20%
Upper Zone	60% / 30%
Non-Residential, between 3 and 8 feet above grade	60% / 30%

Blank Wall Area, Primary (max) / Secondary Street (max)	35' / 45'
---	-----------

Pedestrian Access / Distance Between Entries

Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'

FRONTAGES

Permitted Frontage Types	
Common Landscape	
Terrace	
Forecourt	
Commercial / Shopfront	

COVERAGE

#	Block	
	Acreage	Coverage Block & Lot
1A	4.3	65-75%
2A	3.7	70-80%
4A	3.0	70-80%
5A	2.3	65-75%

SMART SITE CENTRAL GREEN DISTRICT

Honoring Industry of Past, Present, and Future

With restoration of the historic roundhouse and the surrounding landscape, Smart Site Central Green becomes a destination for studying and promoting the exploration of environmental, water, and energy production. Smart Site Central Green will host applied research that will advance transportation, district energy, renewable resources, and sustainable land practices.

The **Economic**, **Social**, and **Physical** framework for Smart Site Central Green consists of:

- E** Geometrically complex lot dimensions set the stage for creative low-built uses such as urban agriculture or clean energy production and harvesting.
- S** Existing fixtures speak to Hazelwood's industrial past and present. Creative reuse of the historic Roundhouse building is an opportunity to continue the legacy of Hazelwood's rich history.
- P** A currently active rail line held by other private owners cuts through the center of Smart Site Central Green. The railroad property will be respected and considered in any site development.



LOCATION CONTEXT



Existing rail ROW cuts through the site; view with Mill 19 beyond



The Roundhouse

SMART SITE CENTRAL GREEN SUB-DISTRICTS

A Land Based Industrial Sub-district

Intent

The sub-districts of Smart Site Central Green illustrated within the PLDP are conceptual in nature and show intent only. Sub-division boundaries shall be defined within the Final Land Development Plan (FLDP) submitted to and approved by the Planning Commission. Sub-district intent is described below.

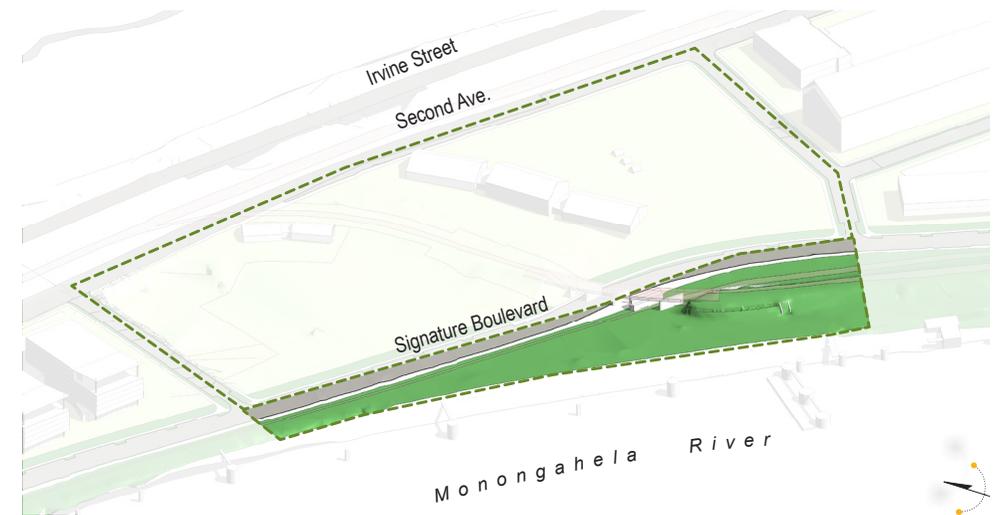
SCG Land Based Industry

Smart Site Central Green is comprised of a single sub-district of two parcels, separated by a rail line.



SCG Open Space

The primary intent of this sub-district is to promote the creation of meaningful places along the water's edge that connects neighborhoods and people to the river and foster water oriented and compatible industrial uses. Refer to Section 1.3 and Section 2.2 for additional information regarding open space intent.



LAND USE TABLE

Permitted Uses Within Sub-Districts

Land Use Intent

Industrial Land Uses are encouraged that promote job generation and site activity. Uses that have a large footprint with few jobs are discouraged.

Commercial Uses that promote civic gathering are encouraged. Uses shall activate and connect to the Signature Boulevard.

Permitted Land Uses

The land use table establishes the **Primary Uses** allowed within each of the Sub-Districts. **Accessory Uses** are permitted in accordance with City of Pittsburgh Zoning Ordinance Chapter 916.

Notes

- Existing Barge Staging to remain on site. Barge Staging is defined as the making up, breaking down, or staging of barge tows for the purpose of transportation and shoring of goods pursuant to permit issued by the United States Army Corps of Engineers.
- Agricultural and nursery uses subject to Act 2 requirements, DEP approval, and all other brownfield development requirements.
- The mix of land use types is based on the initial master plan vision. Actual use quantities and percentages will be defined through the FLDP process.

Land Use Type	Gross Square Footage
Green Tech	36,000
Commercial	<u>36,000</u>
Total	72,000

LAND USE	PROPOSED CLASSIFICATION		USE STANDARD
	Land Based Industry	Open Space	
COMMERCIAL			
Agriculture (Limited)	SE	-	911.04.A.2(c)
Agriculture (Limited with beekeeping)	SE	-	911.04.A.2(b)
Agriculture (General)	SE	-	911.04.A.2(a)
Art or Music Studio	P	-	-
Bank or Financial Institution (Limited)	P	-	911.04.A.96
Bank or Financial Institution (General)	P	-	911.04.A.96
Basic Industry	P	-	-
Child Care (Limited)	CU	-	911.04.A.12(b)
Child Care (General)	CU	-	911.04.A.12(b)
Educational Classroom Space (Limited)	AE	-	911.04.A.20(a)
Educational Classroom Space (General)	AE	-	911.04.A.21(a)
Grocery Store (Limited)	P	-	911.04.A.82(a)
Manufacturing and Assembly (Limited)	P	-	911.04.A.39(a)
Manufacturing and Assembly (General)	P	-	911.04.A.39(a); 40
Nursery, Retail (Limited)	P	P	911.04.A.80(d)
Nursery, Retail (General)	P	P	-
Outdoor Retail Sales and Services	P	AE	911.04.A.91
Recreation and Entertainment, Indoor (Limited)	SE	CU	911.04.A.48(a)
Recreation and Entertainment, Indoor (General)	SE	CU	911.04.A.47(d)
Recreation and Entertainment, Outdoor (Limited)	SE	CU	911.04.A.49(b)
Recreation and Entertainment, Outdoor (General)	SE	CU	911.04.A.50(a)
Restaurant (Limited)	P	CU	911.04.A.56(c)
Restaurant (General)	P	CU	911.04.A.57(a)
Retail Sales and Services (Limited)	P	-	911.04.A.58
Retail Sales & Services, Residential Convenience	SE	-	911.04.A.60
Sidewalk Café	P	AE	911.04.A.68
Welding or Machine Shop	P	-	911.04.A.79(b)
OFFICE			
Laboratory/Research Services (Limited)	P	-	911.04.A.37(b)
Office (Limited)	P	-	911.04.A.42(a)
Office (General)	P	-	911.04.A.43(a)
CIVIC			
Club (Limited)	P	-	-
Club (General)	SE	-	911.04.A.88

P = PERMITTED BY RIGHT AE = ADMINISTRATOR EXCEPTION
 SE = SPECIAL EXCEPTION CU = CONDITIONAL USE

USES NOT LISTED AND BOXES WITH NO DESIGNATION SIGNIFY PROHIBITED USES

LAND USE	PROPOSED CLASSIFICATION		USE STANDARD
	Land Based Industry	Open Space	
College or University Campus	CU	-	911.04.A.90(a)
Community Center (Limited)	SE	-	911.04.A.14(a)(1)
Community Center (General)	SE	-	911.04.A.14(a)(1)
Cultural Service (Limited)	AE	CU	911.04.A.18(a)
Cultural Service (General)	AE	CU	911.04.A.19(a)
Library (Limited)	CU	-	911.04.A.38(c)
Library (General)	CU	-	911.04.A.38(c)
Parks and Recreation (Limited)	AE	P	911.04.A.46(c)
Parks and Recreation (General)	AE	P	911.04.A.46(c)
Religious Assembly (Limited)	SE	-	911.04.A.53
Religious Assembly (General)	SE	-	911.04.A.53
Safety Service	SE	-	911.04.A.61(d)
School, Elementary or Secondary (Limited)	CU	-	911.04.A.63(b)
School, Elementary or Secondary (General)	CU	-	911.04.A.64(b)
Vocational School (Limited)	SE	-	911.04.A.77(b)
Vocational School (General)	CU	-	911.04.A.77(b)
MISCELLANEOUS			
Bed and Breakfast (Limited)	CU	-	911.04.A.7; 8(a)
Bed and Breakfast (General)	CU	-	911.04.A.7; 9(a)
Freight Terminal	CU	-	911.04.A.24
Helicopter Landing (Helipad and Heliport)	CU	-	911.04.A.28-29
Helistop	CU	-	911.04.A.28; 31-32
Hotel/Motel (Limited)	SE	-	911.04.A.33(b)
Incinerator, Solid Waste	CU	-	911.04.A.36
Transit Facility	SE	-	911.04.A.70
Parking, Commercial (Limited)	P	-	911.04.A.44(b)
Parking, Commercial (General)	P	-	911.04.A.45(a)
Parking Structure (Limited)	P	-	911.04.A.87(a)(3)
Parking Structure (General)	P	-	911.04.A.87(b)(3)
Utility (Limited)	SE	-	911.04.A.71
Utility (General)	SE	-	911.04.A.72
RIVER ORIENTED USES			
Barge Staging	SE	-	-
River to Railroad Transfer	SE	-	-

REGULATING & FACADE ZONE PLAN

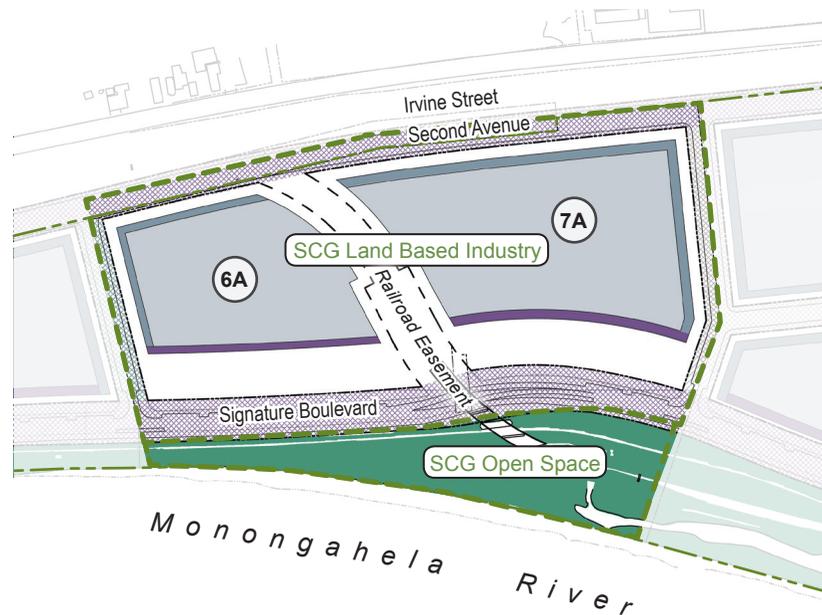
Depicting Rights-of-Ways, Open Space, and Development Blocks

The Smart Site Central Green Regulating Plan depicts the three primary district systems: **Rights-of-way, Open Space, and Development Blocks.**

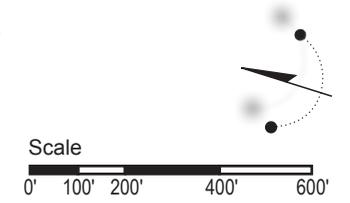
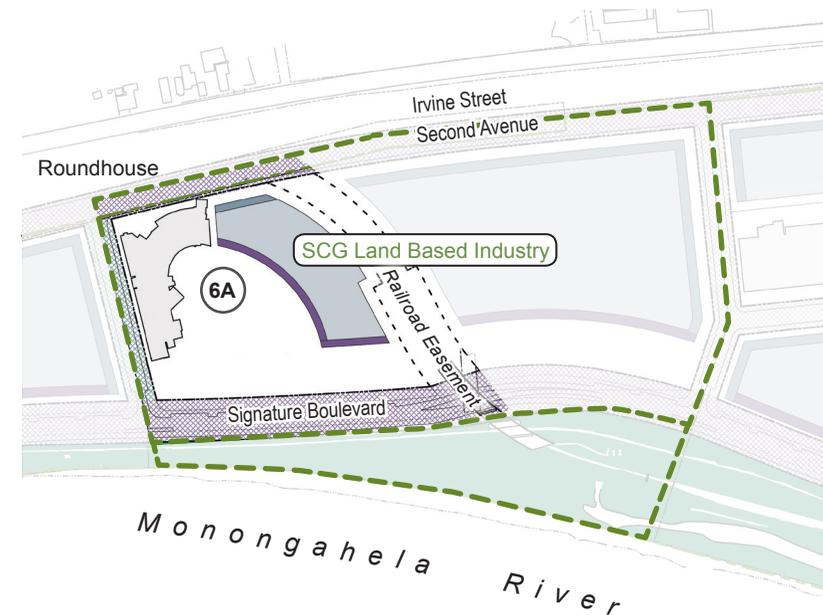
The following images and metrics depicted in the Building Development Sites regulations are applicable to new building construction. Existing buildings undergoing major renovation shall comply with the spirit and intent where feasible.

- ▶ **Rights-of-Way** describe locations where the building interface at the right-of-way activates the public realm. Additional information is provided in Section 2.1.
- ▶ **Open Space** describes neighborhood park spaces within each sub-district. Additional information is provided in Section 2.2
- ▶ **Development Blocks** refers to the land area available for building development.

Regulating Plan: New Construction



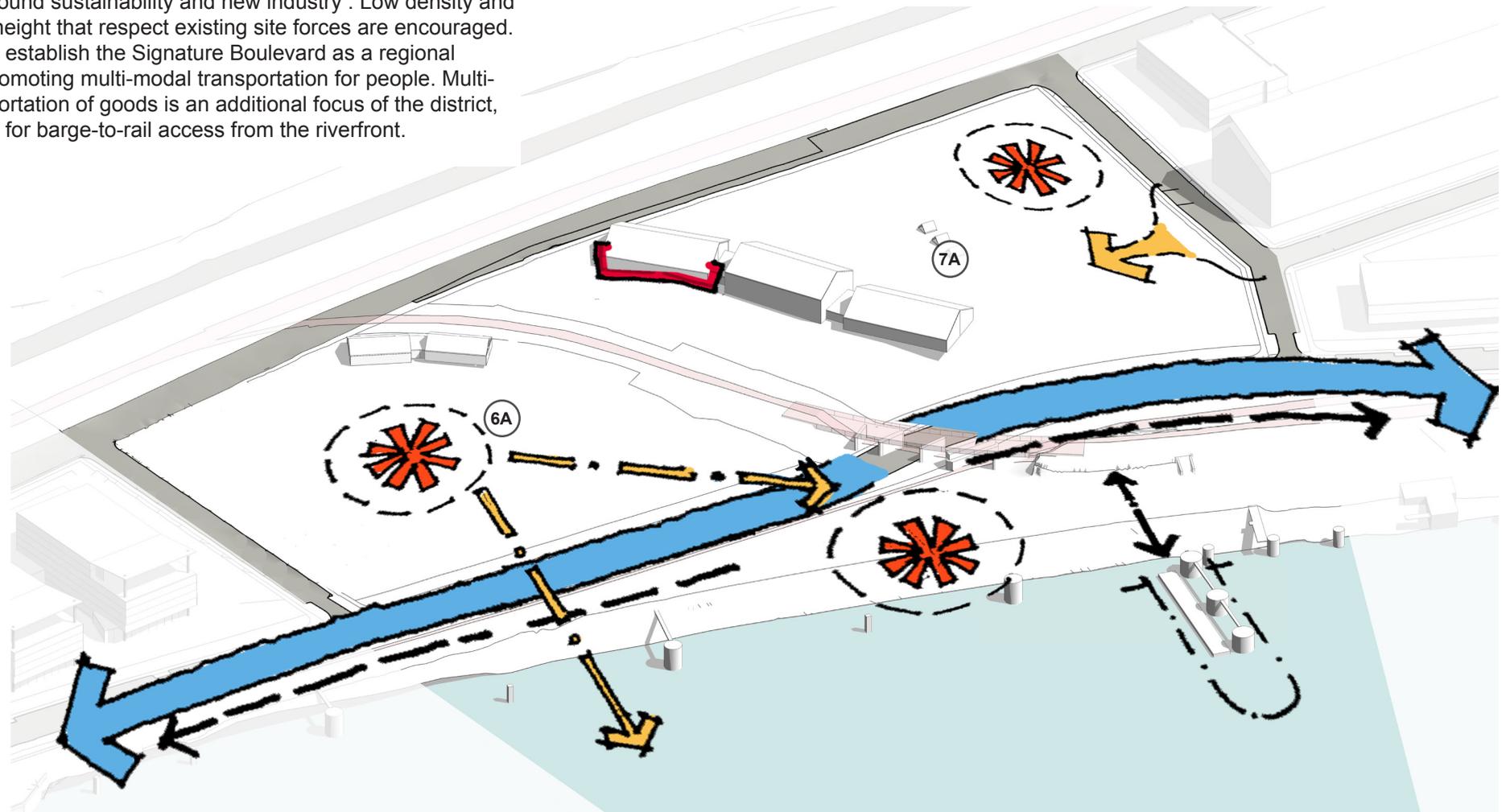
Regulating Plan: Re-use Existing Structure



SITE FORCES

A Low Density District for Land-Based Industry

Smart Site Central Green provides an area for research and innovation around sustainability and new industry . Low density and low building height that respect existing site forces are encouraged. This area will establish the Signature Boulevard as a regional connector, promoting multi-modal transportation for people. Multi-modal transportation of goods is an additional focus of the district, with potential for barge-to-rail access from the riverfront.



SSCG LAND BASED INDUSTRY

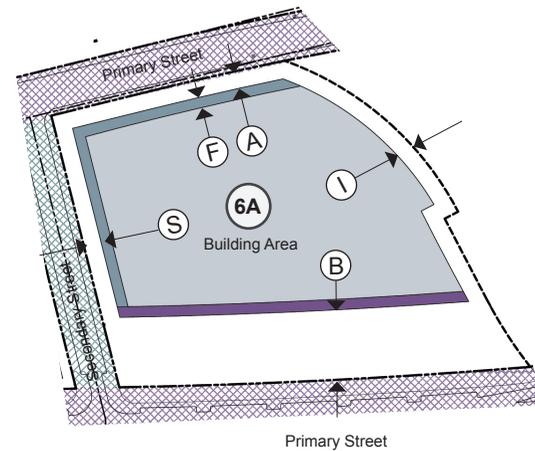
Building Placement Intent

- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating Plan, Civic Zones are always located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from the Signature Boulevard.

Lot Diagram



BUILDING PLACEMENT

Building Setbacks

P	Primary Street	
A	Second Avenue	25'
B	Signature Boulevard	100'
S	Secondary Street (min.)	25'
I	Interior	6'
	Interior, Adjacent to Rail Easement	0'
R	Rear	25'

Facade Zone Depth From Setback Line

F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	15'

Facade Built within Facade Zone

	Primary Street (min.)	80%
	Secondary Street (min.)	45%
	Civic Facade Zone (min.)	90%

- Building Area
- Facade Zone
- Civic Zone
- Parking Area
- Curb Cuts Allowed
- Property Line
- Interior Subdivision Line

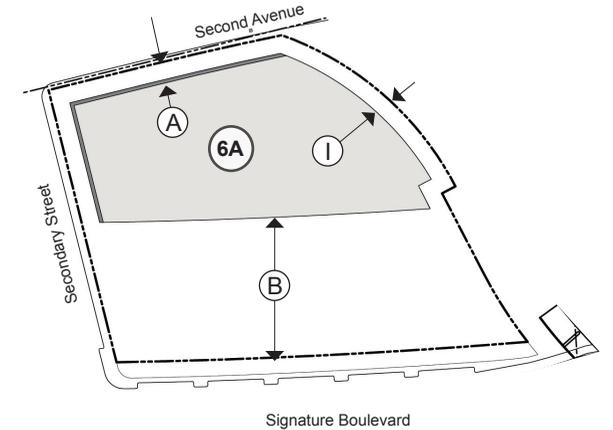
Parking Placement Intent

- Promote a comprehensive district-wide approach to parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of shared parking between adjacent parcels.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.

Applicable to Parking Placement & Access

- The primary street setback encourages placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The secondary street structured parking setback is intended to reserve future liner building development opportunities.
- The Signature Boulevard "B" setback applies to all parcels regardless whether the parcel has frontage on the Signature Boulevard.
- Limited access drives are permitted from primary streets. Such drives shall be limited to one per block.
- Off-street surface parking is prohibited between street and building.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



PARKING PLACEMENT & ACCESS

Setbacks

P	Primary Street	
A	Second Avenue	25'
B	Signature Boulevard	200'
S	Secondary Street (min.)	25'
I	Interior (adjacent to rail easement)	25'
R	Rear / Adjacent to way	25'

Required Spaces

Refer to Chapter 914 for requirements.

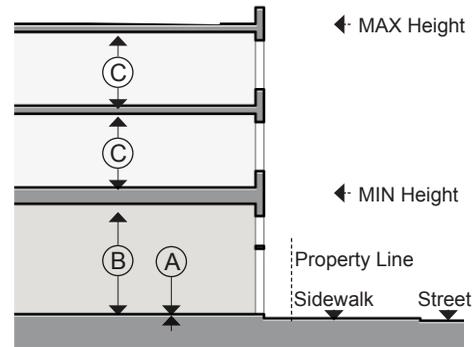
SSCG LAND BASED INDUSTRY

Applicable to Building Height & Articulation

Pedestrian Access

- Entrance spacing requirements are to be met per building. Entrances on adjacent buildings are not applicable.
 - A corner entrance meets the street-facing entrance requirements.
 - An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.
- Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

Height Diagram



District Intent Diagram



Incentives

- Height bonus permitted for **LEED Silver minimum certified buildings** subject to 915.04.F.
- Lot coverage increase permitted for structured parking. Structures will comply with setback guidelines.

BUILDING HEIGHT & ARTICULATION

Building Height	
Building Height (min.)	1 story / 15'
Building Height (max.)	3 stories
Building Height (bonus)	1 additional story
Story Height	
A	Ground Floor Elevation (min. / max.)
	<i>Non-Residential</i> 0" - 6"
B	Ground Story Height, Floor to Ceiling (min.)
	<i>Office (min.)</i> 9'
	<i>Non-Office (min. - max.)</i> 12'-18'

Building Form

Street-Facing Wall Length w/o Offset (max.)	100'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	8'
Building Length, Street-Facing Facade (max.)	120'

Transparency (Clear glass facades)

Ground Story, Primary / Secondary Streets (min)	40% / 20%
Upper Story, Street-Facing Facade (min)	20%
Blank Wall Area, Primary / Secondary Street (max)	35' / 45'

FRONTAGES

Permitted Frontage Types

Commercial / Shopfront
Forecourt
Common Landscape

COVERAGE

#	Block	Coverage
	Acreage	Block & Lot
6A	5.5	15-60%
7A	7.6	15-60%

ECO-TECH PARK DISTRICT

Ecology and Technology

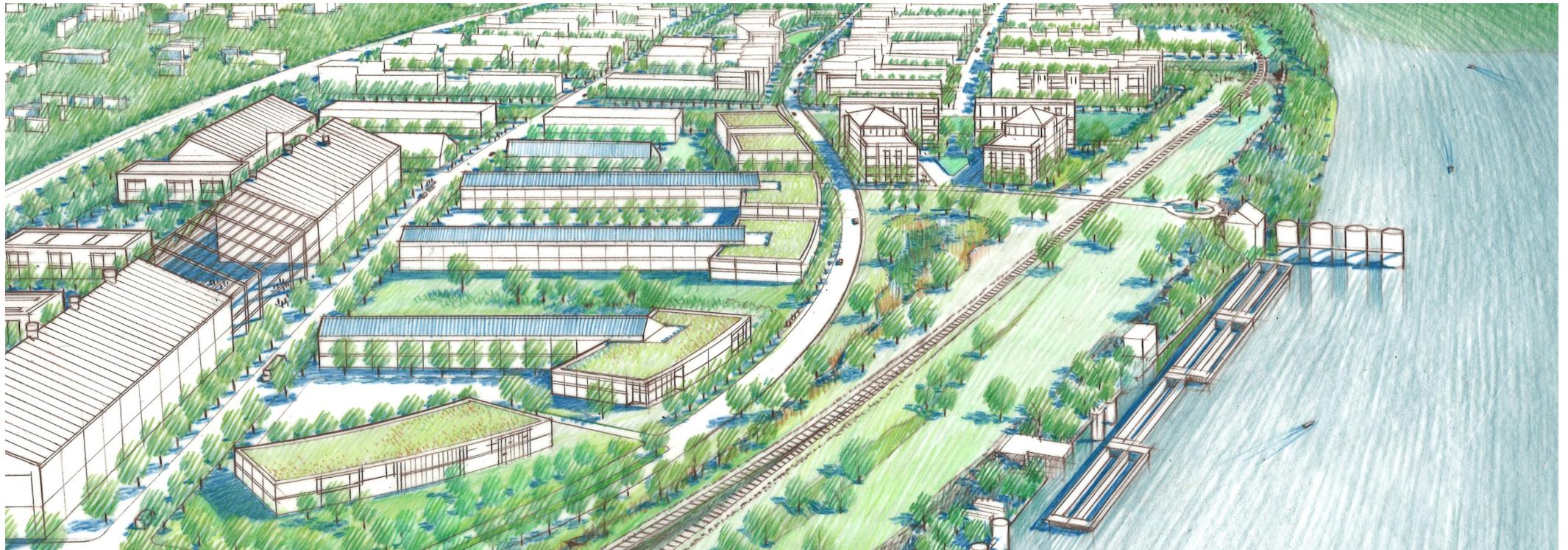
A short walk from surrounding neighborhoods, Eco-Tech Park will house new clean industries, providing local and regional job opportunities in a high quality work environment. This site has the opportunity to lead in re-defining the relationship between applied knowledge, regional economic benefit, environmental reconciliation, energy use, and industrial property.

The **Economic, Social, and Physical** framework for Eco-Tech Park consists of:

E A location for new industry to create jobs

S Connecting today industry with the natural ecology of the site through open spaces and the trail network.

P Industrial elements provide opportunities for adaptive reuse to communicate a legacy of Hazelwood's industrial past.



LOCATION CONTEXT



Existing industrial river infrastructure



Mill 19

ECO-TECH PARK SUB-DISTRICTS

High Density Mixed-Use Sub-Districts

Intent

The sub-districts of Eco-Tech Park illustrated within the PLDP are conceptual in nature and show intent only. Sub-division boundaries shall be defined within the Final Land Development Plan (FLDP) submitted to and approved by the Planning Commission. Sub-district intent is described as follows:

ETP Light Industrial Intent

The primary intent of this sub-district is to promote clean, light industrial uses that can capitalize on transportation access and land use. Parcel-based open space is established to provide a view corridor that leads to the river.



ETP Mixed-Use Intent

The primary intent of this sub-district is to promote a mixture of commercial, office and light industrial uses that front a common open space amenity.



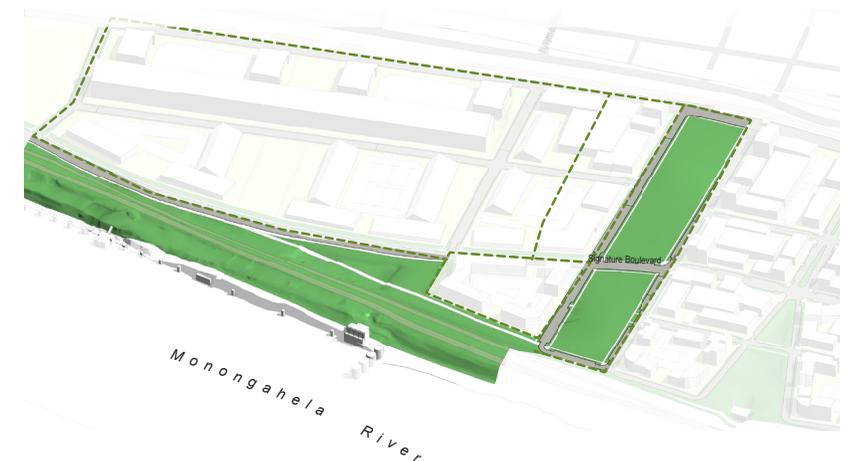
ETP Flex Intent

The primary intent of this sub-district is to connect high density development and residents while allowing for other dense uses at the river. Multiple front-ages and access points are provided to the river's edge, common open space, and trail network.



ETP Open Space Intent

The primary intent of this sub-district is to promote the creation of a local and regional outdoor recreational amenity mixed with compatible industrial uses. Refer to Section 1.3 and Section 2.2 for additional information regarding open space intent.



LAND USE TABLE

Permitted Uses Within Sub-Districts

Land Use Intent

As a mixed-use, high-density district, the buildings are intended to house a range of uses including residential and office on the upper stories. Ground floor uses shall activate the street with amenities to serve the other uses.

Permitted Land Uses

The land use table establishes the **Primary Uses** allowed within each of the Sub-Districts. **Accessory Uses** are permitted in accordance with City of Pittsburgh Zoning Ordinance Chapter 916.

Notes

1. Existing Barge Staging to remain on site. Barge Staging is defined as the making up, breaking down, or staging of barge tows for the purpose of transportation and shoring of goods pursuant to permit issued by the United States Army Corps of Engineers.

2. The mix of land use types is based on the initial master plan vision. Actual use quantities and percentages will be defined through the FLDP process.

Land Use Type	Gross Square Footage
Residential	234,000
Commercial	277,920
Industrial	649,645
Total	1,161,565

P = PERMITTED BY RIGHT
 AE = ADMINISTRATOR EXCEPTION
 SE = SPECIAL EXCEPTION
 CU = CONDITIONAL USE

USES NOT LISTED AND BOXES WITH NO DESIGNATION SIGNIFY PROHIBITED USES

LAND USE	PROPOSED CLASSIFICATION				USE STANDARD
	Light Industrial	Flex	Mixed-Use	Open Space	
RESIDENTIAL					
Multi-Unit Residential	-	P	-	-	911.04.A.85 (a)
Assisted Living (Class B & C)	-	SE	-	-	911.04.A.66 (b) & (c-2)
Community Home	-	SE	-	-	911.04.A.84
Housing for the Elderly (Limited)	-	SE	-	-	911.04.A.35(a)
Housing for the Elderly (General)	-	SE	-	-	911.04.A.35(a)
Personal Care Residence (Small)	-	SE	-	-	911.04.A.95B (b)
Personal Care Residence (Large)	-	SE	-	-	911.04.A.95A
COMMERCIAL					
Agriculture (Limited)	SE	-	-	-	911.04.A.2(c)
Agriculture (Limited with beekeeping)	SE	-	-	-	911.04.A.2(b)
Agriculture (General)	SE	-	-	-	911.04.A.2(a)
Amusement Arcade	P	-	P	-	911.04.A.3
Art or Music Studio	P	SE	P	-	(None)
Bank or Financial Institution (Limited)	P	-	P	-	911.04.A.96
Bank or Financial Institution (General)	P	-	P	-	911.04.A.96
Basic Industry	P	-	P	-	(None)
Child Care (Limited)	-	P	P	-	911.04.A.12(a)
Child Care (General)	-	P	P	-	911.04.A.12(a)
Construction Contractor (Limited)	SE	-	-	-	911.04.A.15
Construction Contractor (General)	SE	-	-	-	(None)
Education Classroom Space (Limited)	P	-	P	-	911.04.A.20(a)
Education Classroom Space (General)	P	-	P	-	911.04.A.20(a)
Grocery Store (Limited)	-	-	P	-	911.04.A.82(a)
Laundry Services	P	-	P	-	911.04.A.67
Manufacturing and Assembly (Limited)	P	P	AE	-	911.04.A.39(a)
Manufacturing and Assembly (General)	P	P	AE	-	911.04.A.39(a); 40
Nursery, Retail (Limited)	SE	-	-	SE	911.04.A.80(d)
Nursery, Retail (General)	SE	-	-	-	911.04.A.80(d)
Outdoor Retail Sales and Services	P	-	P	AE	911.04.A.91
Recreation and Entertainment, Indoor (Limited)	P	-	P	CU	911.04.A.48(a)
Recreation and Entertainment, Indoor (General)	P	-	P	CU	911.04.A.47(d)
Restaurant (Limited)	P	P	P	CU	911.04.A.56(c)
Restaurant (General)	P	P	P	CU	911.04.A.57(a)
Retail Sales and Services (Limited)	SE	-	SE	-	911.04.A.58
Retail Sales and Services (General)	P	-	P	-	911.04.A.59(b)
Retail Sales and Services, Residential Convenience	P	P	P	-	911.04.A.60
Sidewalk Cafe	P	P	P	AE	911.04.A.68
Warehouse (Limited)	P	-	-	-	911.04.A.78(a)
Warehouse (General)	P	-	-	-	911.04.A.78(c)
Welding or Machine Shop	P	P	-	-	911.04.A.79(b)

LAND USE	PROPOSED CLASSIFICATION				USE STANDARD
	Light Industrial	Flex	Mixed-Use	Open Space	
OFFICE					
Laboratory/Research Services (General and Limited)	P	-	P	-	911.04.A.37(a)
Medical Office/Clinic (Limited)	P	P	P	-	911.04.A.81(2)
Medical Office/Clinic (General)	P	P	P	-	911.04.A.81(2)
Office (Limited)	P	P	P	-	911.04.A.42(a)
Office (General)	P	P	P	-	911.04.A.43(a)
CIVIC					
College or University Campus	SE	-	CU	-	911.04.A.90a
Community Center (Limited)	SE	CU	P	-	911.04.A.14(2)
Community Center (General)	SE	CU	P	-	911.04.A.14(2)
Cultural Service (Limited)	P	P	P	CU	911.04.A.18(a)
Cultural Service (General)	P	P	P	CU	911.04.A.19(c)
Library (Limited)	CU	CU	CU	-	911.04.A.38(c)
Library (General)	CU	CU	CU	-	911.04.A.38(c)
Parks and Recreation (Limited)	AE	AE	AE	CU	911.04.A.46(c)
Parks and Recreation (General)	AE	AE	AE	CU	911.04.A.46(c)
Public Assembly (Limited)	SE	-	SE	CU	911.04.A.5(b)
Public Assembly (General)	SE	-	SE	CU	911.04.A.6a
Religious Assembly (Limited)	CU	CU	CU	-	911.04.A.53
Religious Assembly (General)	CU	CU	CU	-	911.04.A.53
Safety Service	P	-	P	-	911.04.A.61(d)
School, Elementary or Secondary (Limited)	-	-	CU	-	911.04.A.63(b)
School, Elementary or Secondary (General)	-	-	CU	-	911.04.A.64(b)
Vocational School (Limited)	SE	-	SE	-	911.04.A.77(b)
Vocational School (General)	CU	-	CU	-	911.04.A.77(b)
MISCELLANEOUS					
Communication Tower Class A	SE	-	-	-	911.04.A.13b
Freight Terminal	SE	-	-	-	911.04.A.24a
Helicopter Landing (Helipad and Heliport)	CU	-	CU	-	911.04.A.28-29
Helistop	SE	-	SE	-	911.04.A.28; 31-32
Hospital	CU	-	CU	-	911.04.A.89(b)
Hotel/Motel (Limited)	-	-	SE	-	911.04.A.33(b)
Incinerator, Solid Waste	SE	-	-	-	911.04.A.36
Parking, Commercial (Limited)	AE	AE	AE	-	911.04.A.44(b)
Parking, Commercial (General)	AE	AE	AE	-	911.04.A.45(a)
Parking Structure (Limited)	AE	AE	AE	-	911.04.A.87(a)(3)
Parking Structure (General)	AE	AE	AE	-	911.04.A.87(b)(3)
Transit Facility	SE	-	SE	CU	911.04.A.70
Utility (Limited)	SE	-	-	-	911.04.A.71
Utility (General)	SE	-	-	-	911.04.A.72
RIVER ORIENTED USES					
Barge Staging	-	-	-	SE	(none)
River to Rail Transfer	-	-	-	SE	(none)

REGULATING & FACADE ZONE PLAN

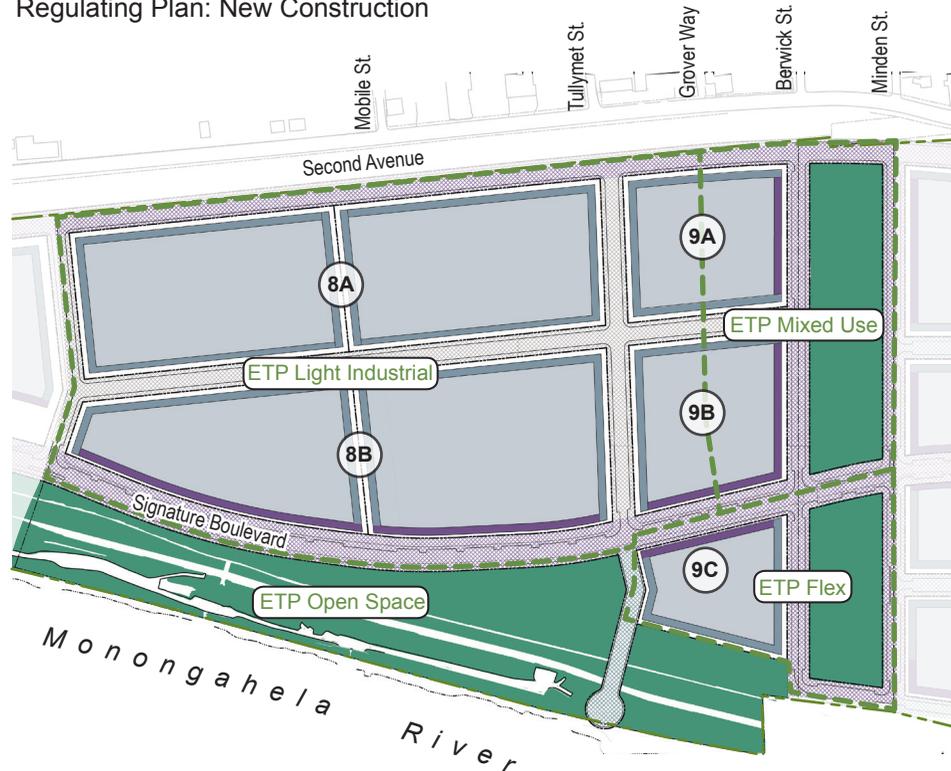
Depicting Rights-of-Ways, Open Space, and Development Blocks

The Eco-Tech Park Regulating Plan depicts the three primary district systems: **Rights-of-way**, **Open Space**, and **Development Blocks**.

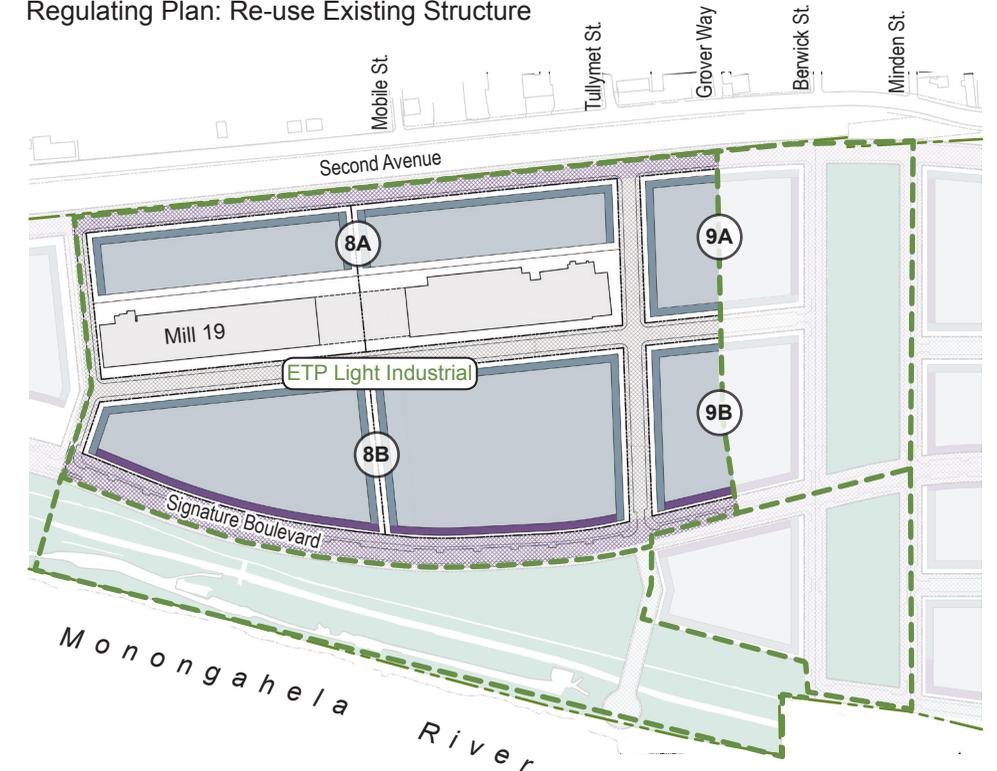
- ▶ **Rights-of-Way** describe locations where the building interface at the right-of-way activates the public realm. Additional information is provided in Section 2.1.
- ▶ **Open Space** describes common open spaces within each sub-district. Additional information is provided in Section 2.2.
- ▶ **Development Blocks** refers to the land area available for building development.

Final Block subdivision shall be defined within the FLDP submission

Regulating Plan: New Construction



Regulating Plan: Re-use Existing Structure



Common Open Space	Facade Zone	Primary Street	Way	Sub-District	Almono Site Property Line	Scale 0' 75' 150' 500' 750'
Building Area	Civic Facade Zone	Secondary Street	Property Line	Block Designation		

Refer to 2.3 - 53 for expanded definitions of terms.

SITE FORCES

A Mixed-Use District with Industrial and Residential Features

Eco-Tech Park is a high density mixed-use district that focuses on clean industry. Energy produced from these industrial uses becomes opportunities to serve as district energy for other site locations. Eco-Tech Park aims to serve the surrounding neighborhood by providing job opportunities for residents in the green industry field, or in ancillary fields that support green industry. This is provided for in the mixed-use sub-district in Eco-Tech Park. A residential sub-district creates an opportunity for people to live and play in close proximity to their jobs in this walkable district.



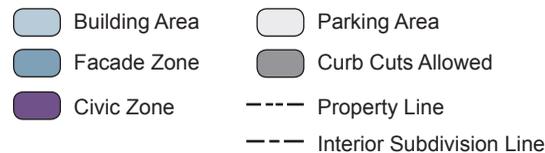
ETP LIGHT INDUSTRIAL

Building Placement Intent

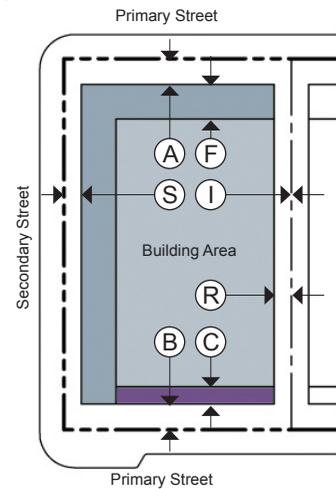
- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are always located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from the Signature Boulevard.
- Where feasible buildings shall be serviced from secondary streets or ways. Zoning administrators shall consider alternate loading configurations where feasible.



Lot Diagram



BUILDING PLACEMENT		
Building Setbacks From Property Line		
P	Primary Street (min. - max.)	0' - 10'
A	Second Avenue (min. - max.)	10' - 20'
B	Signature Boulevard (min. - max.)	0' - 20'
S	Secondary Street (min. - max.)	0' - 10'
I	Interior (min.)	20'
R	Rear (adjacent to way / subdivision line)	0' / 6'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	10'
	Signature Boulevard	25'
Facade Built within Facade Zone		
	Primary Street (min.)	80%
	Secondary Street (min.)	35%
	Civic Facade Zone (min.)	85%

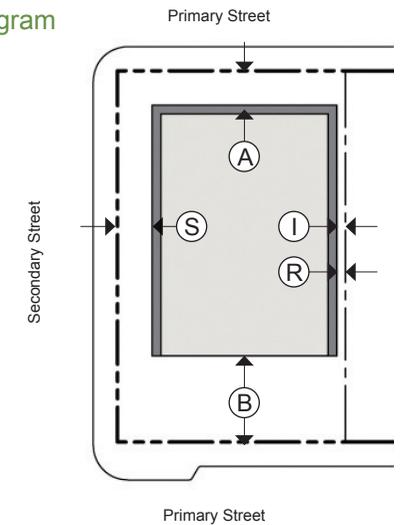
Parking Placement Intent

- Promote a comprehensive district-wide approach to parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of shared parking between adjacent parcels.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.

Applicable to Parking Placement & Access

- The primary street setback encourages the placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The interior setback encourages shared parking areas between adjacent parcels with shared drive aisles between lots.
- The secondary street structured parking setback is intended to reserve future liner building development opportunities.
- Limited access drives are permitted from primary streets and shall be limited to two per block.
- Off-street surface parking is prohibited between street and street-facing building facade.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



PARKING PLACEMENT & ACCESS		
Parking Setbacks		
P	Primary Street	
A	Second Avenue (min.)	10'
B	Signature Boulevard (min.)	50'
S	Secondary Street (surface / structured)	10' / 30'
I	Interior (surface / structured)	5' / 20'
R	Rear (adjacent to way / subdivision line)	5' / 10'
Required Spaces		
Refer to Zoning Code, Chapter 914 for requirements.		

Applicable to Building Height & Articulation

1. Light Industrial **Primary Building Components** refer to buildings fronting the Signature Boulevard or Second Avenue.
2. Light Industrial **Ancillary Building Components** refer to buildings located in parcel interior.

Pedestrian Access

1. Entrance spacing requirements are to be met per building. Entrances on adjacent buildings are not applicable.
2. A corner entrance meets the street-facing entrance requirements.
3. An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

Parking

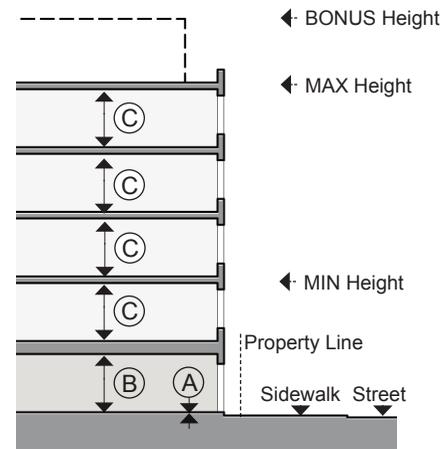
1. Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

Incentives

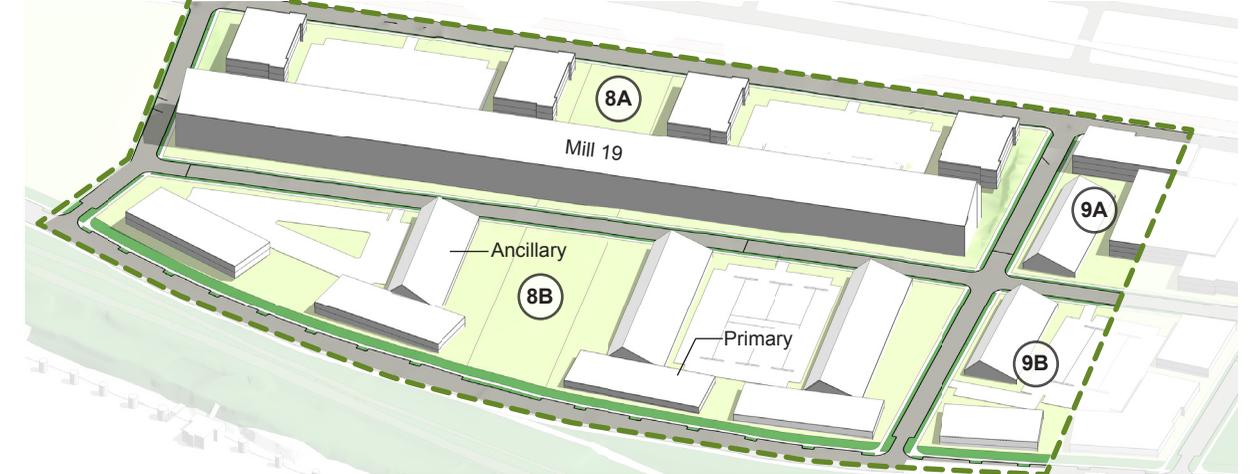
1. Height bonus permitted for **LEED-Silver minimum certified buildings** subject to 915.04.F.
2. Lot coverage increase permitted for structured parking. Structures shall comply with setback guidelines.

COVERAGE		
	Block	Coverage
#	Acreage	Block & Lot
8A	12.0	50-60%
8B	15.0	50-60%

Height Diagram



District Intent Diagram



Primary Buildings Components are intended to front and define the public realm of the signature boulevard, with **Ancillary Building Components** extending perpendicular to define a view corridor to the river. Where possible, connecting to the existing Mill 19 building is encouraged.

BUILDING HEIGHT & ARTICULATION

Building Height	
Building Height (min.)	
Primary Building Component	2 stories
Ancillary Building Component	1 story / 15'
Building Height (max.)	
Primary Building Component	5 stories
Ancillary Building Component	5 stories
Building Height (bonus)	1 additional story

Building Form	
Street-Facing Wall Length w/o Offset (max.)	100'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	8'
Building Length Street-Facing Facade (max.)	120'

Transparency (Clear glass facades)

Ground Story, Primary / Secondary Streets (min.)	20% / 20%
Upper Story, Street Facing Facade (min.)	20%
Non-Residential, Primary / Secondary Street between 3 and 8 feet above grade	60% / 30%
Blank Wall Area, Primary / Secondary Street (max)	35' / 45'

Pedestrian Access / Distance Between Entries

Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'

FRONTAGES

Permitted Frontage Types
Common Lawn
Terrace
Forecourt
Commercial / Shopfront
Permitted Frontage Types in Civic Zones
Terrace
Forecourt
Commercial / Shopfront

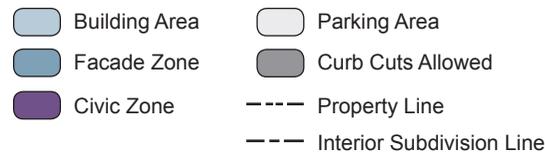
ETP MIXED-USE

Building Placement Intent

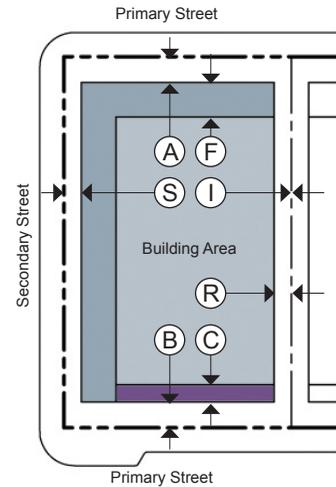
- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are always located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from the Signature Boulevard.
- Where feasible buildings shall be serviced from secondary streets or ways. Zoning administrators shall consider alternate loading configurations where feasible.



Lot Diagram



BUILDING PLACEMENT		
Building Setbacks From Property Line		
P	Primary Street (max.)	10'
A	Second Avenue (max.)	10'
B	Signature Boulevard (max.)	5'
S	Secondary Street max.)	10'
I	Interior (min.)	0'
R	Rear (adjacent to way / subdivision line)	0' / 6'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	10'
	Signature Boulevard	25'
Facade Built within Facade Zone		
	Primary Street (min.)	80%
	Secondary Street (min.)	45%
	Civic Facade Zone (min.)	90%

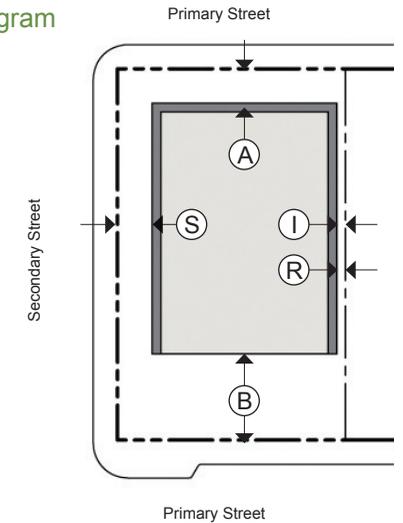
Parking Placement Intent

- Promote a comprehensive district-wide approach to parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of shared parking between adjacent parcels.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.

Applicable to Parking Placement & Access

- The primary street setback encourages the placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The interior setback encourages shared parking areas between adjacent parcels with shared drive aisles between lots.
- The secondary street structured parking setback is intended to reserve future liner building development opportunities.
- Limited access drives are permitted from primary streets and shall be limited to two per block.
- Off-street surface parking is prohibited between street and street-facing building facade.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



PARKING PLACEMENT & ACCESS		
Parking Setbacks (min.)		
P	Primary Street	30'
A	Second Avenue	50'
B	Signature Boulevard	50'
S	Secondary Street (surface / structured)	10' / 30'
I	Interior (surface / structured)	5' / 20'
R	Rear	5'
Required Spaces		

Refer to Zoning Code, Chapter 914 for requirements.

Applicable to Building Height & Articulation

Pedestrian Access

1. Entrance spacing requirements are to be met per building. Entrances on adjacent buildings are not applicable.
2. A corner entrance meets the street-facing entrance requirements.
3. An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

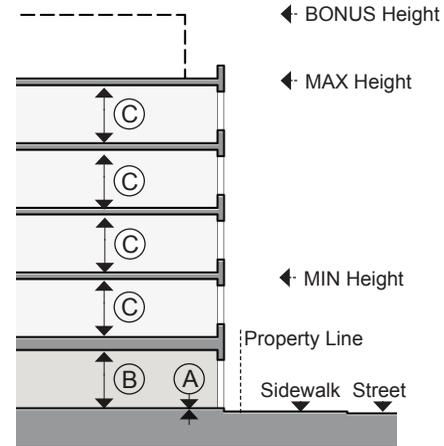
Parking

1. Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

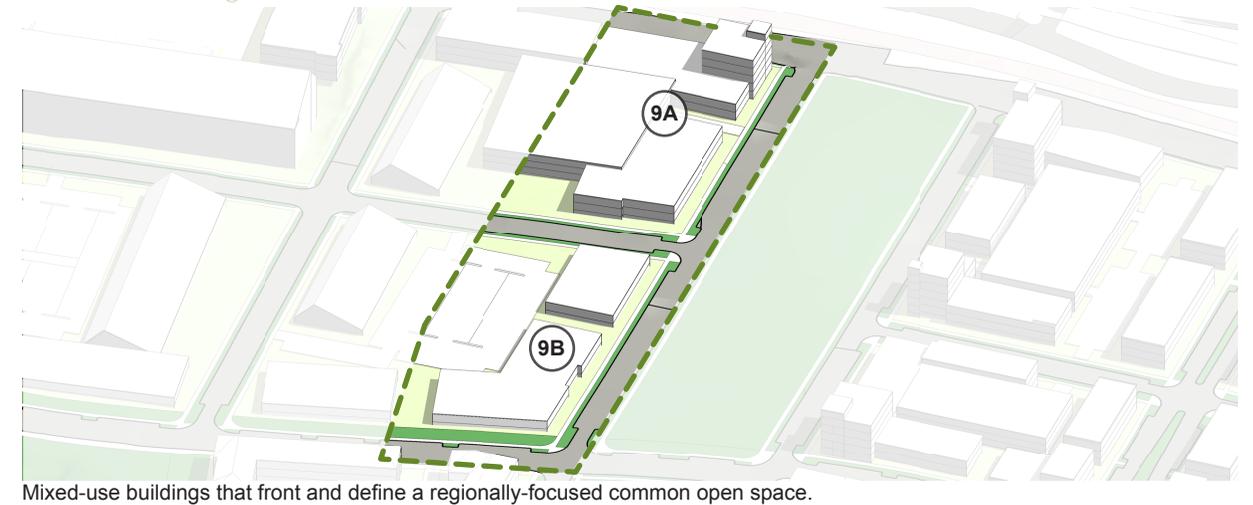
Incentives

1. Height bonus permitted for LEED-Silver minimum certified buildings subject to 915.04.F.
2. Lot coverage increase permitted for structured parking. Structures shall comply with setback guidelines.

Height Diagram



District Intent Diagram



Mixed-use buildings that front and define a regionally-focused common open space.

BUILDING HEIGHT & ARTICULATION	
Building Height	
Building Height (min.)	2 stories
Building Height (max.)	7 stories
Building Height (bonus)	1 additional story
Story Height	
A Ground Floor Elevation (min. - max.)	
Residential / Non-residential	2' - 4' / 0" - 6"
B Ground Story Height, Floor to Ceiling (min. / min. - max.)	
Residential / Non-residential	9' / 12' - 15'
C Upper Story Height, Floor to Ceiling (min.)	8'
Building Form	
Street-Facing Wall Length w/o Offset (max.)	100'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	8'
Building Length Street-Facing Facade (max.)	120'
Transparency (Clear glass facades)	
Ground Story, Primary / Secondary Streets (min.)	20% / 20%
Upper Story, Street Facing Facade (min.)	20%
Non-Residential, Primary / Secondary Street between 3 and 8 feet above grade	60% / 30%
Blank Wall Area, Primary / Secondary Street (max)	35' / 45'
Pedestrian Access / Distance Between Entries	
Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'
Distance between Upper Floor Entrances along Primary Street (max)	75'

FRONTAGES		
Permitted Frontage Types		
	Stoop	
	Terrace	
	Forecourt	
	Commercial / Shopfront	
Permitted Frontage Types in Civic Zones		
	Terrace	
	Forecourt	
	Commercial / Shopfront	
COVERAGE		
	Block	Coverage
#	Acreage	Block & Lot
9A	3.7	80-90%
9B	4.2	80-90%

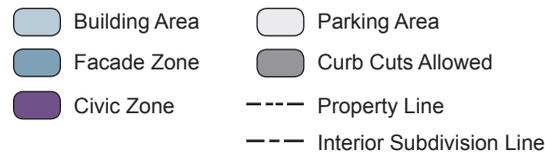
ETP FLEX

Building Placement Intent

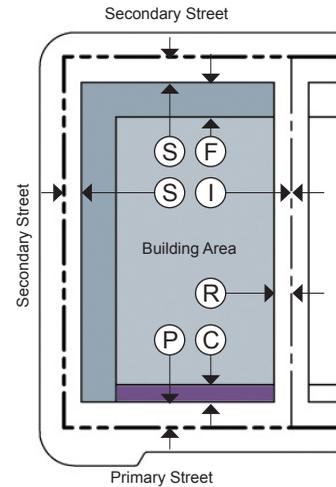
- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are always located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from the Signature Boulevard.
- Where feasible buildings shall be serviced from secondary streets or ways. Zoning administrators shall consider alternate loading configurations where feasible.



Lot Diagram



BUILDING PLACEMENT		
Building Setbacks From Property Line		
P	Primary Street (max.)	10'
S	Secondary Street (max.)	15'
O	Abuts ETP Open Space (max.)	10'
I	Interior (min.)	6'
R	Rear (adjacent to way / subdivision line)	0' / 5'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	5'
Facade Built within Facade Zone		
	Primary Street (min.)	70%
	Secondary Street (min.)	35%
	Civic Facade Zone (min.)	80%

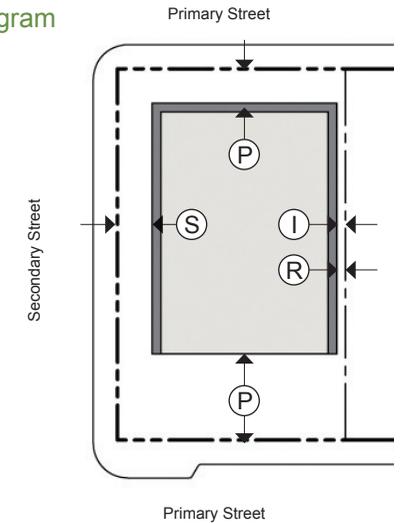
Parking Placement Intent

- Promote a comprehensive district-wide approach to parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of shared parking between adjacent parcels.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.

Applicable to Parking Placement & Access

- The primary street setback encourages the placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The interior setback encourages shared parking areas between adjacent parcels with shared drive aisles between lots.
- The secondary street structured parking setback is intended to reserve future liner building development opportunities.
- Limited access drives are permitted from primary streets and shall be limited to two per block.
- Off-street surface parking is prohibited between street and street-facing building facade.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



PARKING PLACEMENT & ACCESS		
Parking Setbacks (min.)		
P	Primary Street (surface / structured)	30'
A	Second Avenue	50'
S	Secondary Street (surface / structured)	10' / 30'
O	Abuts ETP Open Space	30'
I	Interior (surface / structured)	5' / 10'
R	Rear (adjacent to way / subdivision line)	5' / 10'
Required Spaces		
Refer to Zoning Code, Chapter 914 for requirements.		

Applicable to Building Height & Articulation

Pedestrian Access

1. Entrance spacing requirements are to be met per building. Entrances on adjacent buildings are not applicable.
2. A corner entrance meets the street-facing entrance requirements.
3. An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

Parking

1. Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

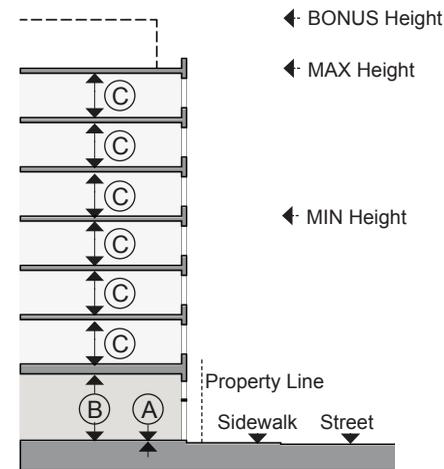
Incentives

1. Height bonus permitted for LEED-Silver minimum certified buildings subject to 915.04.F.
2. A height bonus is available for developments including a minimum of 15% Affordable Housing. Developers are responsible to provide sufficient documentation, determined by the Zoning Administrator, as binding evidence of compliance with the parameters of affordable housing in order to receive the density bonus.

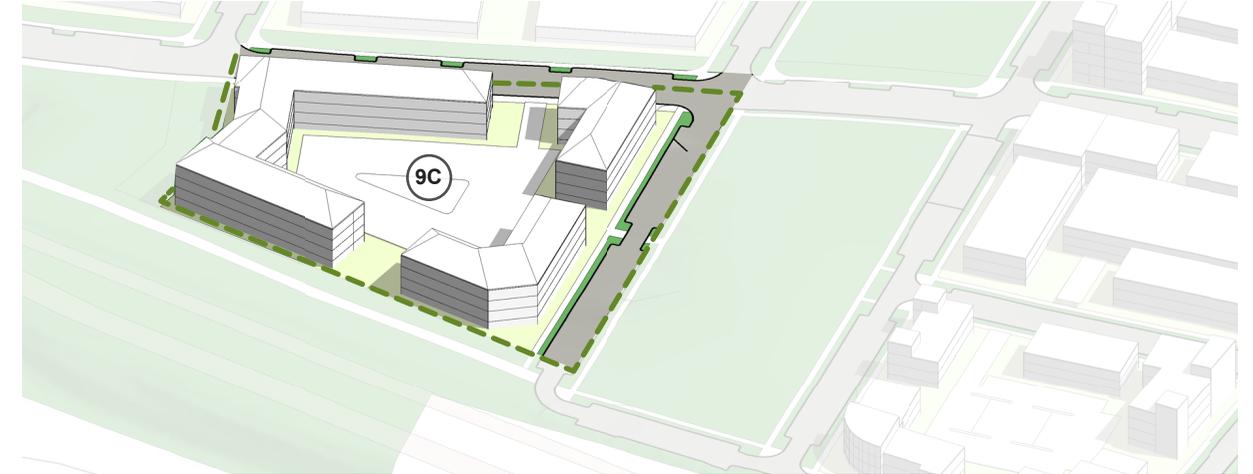
Affordable Housing as defined and amended by the Department of Housing and Urban Development provides rental units for households that cost no more than 30% of its annual income. Affordable for sale housing will have an initial purchase price that does not exceed 95% of the median purchase price for the area as determined by the Secretary of HUD.

3. Lot coverage increase permitted for structured parking. Structures shall comply with setback guidelines.

Height Diagram



District Intent Diagram



This site offers four distinct addresses fronting four unique adjacencies: mixed use along the Signature Boulevard; regional recreation at Hazelwood Fields; riverfront and potential public transit; and a view corridor towards downtown Pittsburgh.

BUILDING HEIGHT & ARTICULATION	
Building Height	
Building Height (min.)	4 stories
Building Height (max.)	7 stories
Building Height (bonus)	1 additional story
Story Height	
A Ground Floor Elevation (min. - max.)	
Residential / Non-residential	2' - 4' / 0" - 6"
B Ground Story Height, Floor to Ceiling (min. / min. - max.)	
Residential / Non-residential	9' / 12' - 15'
C Upper Story Height, Floor to Ceiling (min.)	8'
Building Form	
Street-Facing Wall Length w/o Offset (max.)	100'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	8'
Building Length Street-Facing Facade (max.)	120'

Transparency (Clear glass facades)	
Ground Story, Primary / Secondary Streets (min.)	20% / 20%
Upper Story, Street Facing Facade (min.)	20%
Non-Residential, Primary / Secondary Street between 3 and 8 feet above grade	60% / 30%
Blank Wall Area, Primary / Secondary Street (max)	35' / 45'

Pedestrian Access / Distance Between Entries	
I Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'

FRONTAGES		
Permitted Frontage Types		
Common Lawn		
Porch		
Stoop		
Terrace		
Forecourt		
Permitted Frontage Types in Civic Zones		
Terrace		
Forecourt		
Commercial / Shopfront		
COVERAGE		
	Block	Coverage
#	Acreage	Block & Lot
9C	2.9	70-90%

HAZELWOOD FLATS DISTRICT

Connecting to the River

Hazelwood Flats establishes a fully connected "fourth corner" to Hazelwood that allows reinvestment to occur on and off-site concurrently. Dynamic neighborhood-scale open spaces anchor the signature boulevard and the site will increase the range and diversity of housing opportunities with the community, taking advantage of the unique assets of the site and the proximity to Hazelwood's core main street.

The **Economic**, **Social**, and **Physical** framework for Hazelwood Flats consists of:

E The redevelopment of the Almono site is a catalyst for spurring investment and job creation on site and in the surrounding community.

S Development in the Hazelwood Flats District shall respect the neighborhood fabric and provide multiple connections to the existing community.

P The new development shall continue the diversity found in the surrounding community.



LOCATION CONTEXT



Hazelwood Flats neighborhood context



View towards site from neighborhood



Church on Second Ave.

View up Hazelwood Ave. from site



View uphill from site

HAZELWOOD FLATS SUB-DISTRICTS

High Density Mixed-Use Sub-Districts

Intent

The sub-districts of Hazelwood Flats illustrated within the PLDP are conceptual in nature and show intent only. Sub-division boundaries shall be defined within the Final Land Development Plan (FLDP) submitted to and approved by the Planning Commission. Sub-district intent is described below.

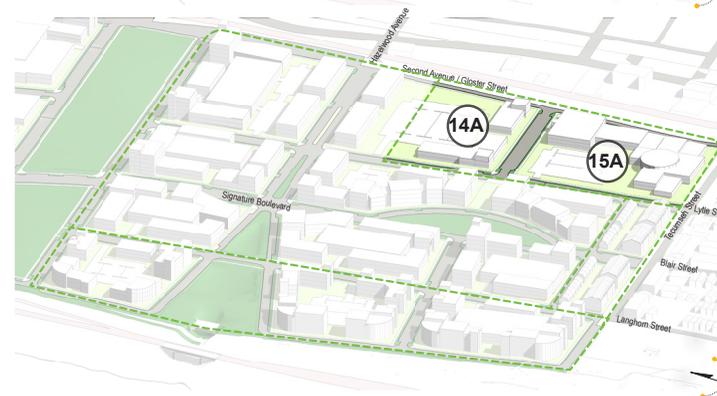
HF Mixed-Use Intent

The primary intent of this sub-district is to promote a mixture of residential and commercial uses that create an active and vibrant streetscape.



HF Flex Intent

The primary intent of this sub-district is to provide transitions between the new development and the existing neighborhood, and between the commercial district and the residential community. This subdistrict is intended as a potential transit location serving the new development and the existing community.



HF Residential A Intent

The primary intent of this sub-district is to ensure a residential physical form that reinforces the adjacent residential buildings in order to provide an appropriate transition from the existing Hazelwood neighborhood.



HF Residential B Intent

The primary intent of this sub-district is to connect residents to the river. High density development attracts residents to the river's edge and multiple access points are provided to the civic open space and trail network.



LAND USE TABLE

Permitted Uses Within Sub-Districts

Land Use Intent

As a mixed-use, high-density district, the buildings are intended to house a range of uses including residential and office on the upper stories. Ground floor uses shall activate the street with amenities to serve the other uses.

Permitted Land Uses

The land use table establishes the **Primary Uses** allowed within each of the Sub-Districts. **Accessory Uses** are permitted in accordance with City of Pittsburgh Zoning Ordinance Chapter 916.

Notes

1. The mix of land use types is based on the initial master plan vision. Actual use quantities and percentages will be defined through the FLDP process.

Land Use Type	Gross Square Footage
Residential	1,329,400
Mixed-Use	122,850
Commercial	225,420
Total	1,677,670

LAND USE	PROPOSED CLASSIFICATION				USE STANDARD
	Flex	Residential-A	Residential-B	Mixed-Use	
RESIDENTIAL					
Single-Unit Attached	P	P	-	P	911.04.A.69a
Multi-Unit Residential	P	P	P	P	911.04.A.85(a)
Assisted Living	SE	SE	SE	SE	911.04.A.66 (a-1) (b-1) (c-1)
Community Home	-	SE	SE	SE	911.04.A.84
Housing for the Elderly (Limited)	P	P	P	P	911.04.A.35(a)
Housing for the Elderly (General)	P	P	P	P	911.04.A.35(a)
Personal Care Residence (Large)	-	SE	SE	SE	911.04.A.95A
Personal Care Residence (Small)	-	SE	SE	SE	911.04.A.95B(b)
COMMERCIAL					
Agriculture (Limited)	SE	SE	SE	SE	911.04.A.2(c)
Art or Music Studio	P	P	P	P	(None)
Bank or Financial Institution (Limited)	-	-	-	AE	911.04.A.96
Bank or Financial Institution (General)	-	-	-	AE	911.04.A.96
Child Care (Limited)	P	-	-	P	911.04.A.12(a)
Child Care (General)	P	-	-	P	911.04.A.12(a)
Grocery Store (Limited)	P	-	-	P	911.04.A.82(a)
Outdoor Retail Sales and Services	-	-	-	SE	911.04.A.91
Recreation and Entertainment, Indoor (Limited)	-	SE	-	SE	911.04.A.48(a)
Restaurant (Limited)	P	-	-	P	911.04.A.56(c)
Restaurant (General)	P	-	-	P	911.04.A.57(a)
Retail Sales and Services (Limited)	P	-	-	P	911.04.A.58
Retail Sales and Services, Residential Convenience	P	P	P	P	911.04.A.60
Sidewalk Café	P	-	P	P	911.04.A.68

LAND USE	PROPOSED CLASSIFICATION				USE STANDARD
	Flex	Residential-A	Residential-B	Mixed-Use	
OFFICE					
Medical Office/Clinic (General)	P	-	-	P	911.04.A.81(3)
Office (Limited)	P	-	-	P	911.04.A.42(a)
CIVIC					
Community Center (Limited)	SE	-	-	P	911.04.A.14(a)(1)
Community Center (General)	SE	-	-	P	911.04.A.14(b)(1)
Cultural Service (Limited)	P	-	-	P	911.04.A.18(a)
Cultural Service (General)	P	-	-	P	911.04.A.19(a)
Library (Limited)	P	P	P	P	911.04.A.38(a)
Library (General)	P	-	-	P	911.04.A.38(c)
Parks and Recreation (Limited)	AE	AE	AE	AE	911.04.A.46(c)
Parks and Recreation (General)	AE	AE	AE	AE	911.04.A.46(c)
Religious Assembly (Limited)	SE	SE	SE	SE	911.04.A.53
Religious Assembly (General)	SE	SE	SE	SE	911.04.A.53
Safety Service	SE	-	-	-	911.04.A.61(b)
School, Elementary or Secondary (Limited)	CU	-	-	-	911.04.A.63(b)
School, Elementary or Secondary (General)	CU	-	-	-	911.04.A.64(b)
MISCELLANEOUS					
Bed and Breakfast (Limited)	-	P	P	-	911.04.A.7; 8a
Bed and Breakfast (General)	-	P	P	-	911.04.A.7; 9a
Hotel/Motel (Limited)	-	-	-	SE	911.04.A.33(b)
Parking, Commercial (Limited)	P	-	P	P	911.04.A.44(b)
Parking, Commercial (General)	P	-	P	P	911.04.A.45(a)
Parking Structure (Limited)	SE	SE	SE	SE	911.04.A.87(a)(3)
Parking Structure (General)	SE	SE	SE	SE	911.04.A.87(b)(3)
Transit Facility	SE	-	SE	SE	911.04.A.70
Utility (Limited)	SE	-	-	-	911.04.A.71
Utility (General)	SE	-	-	-	911.04.A.72

P = PERMITTED BY RIGHT
 AE = ADMINISTRATOR EXCEPTION
 SE = SPECIAL EXCEPTION
 CU = CONDITIONAL USE

USES NOT LISTED AND BOXES WITH NO DESIGNATION SIGNIFY PROHIBITED USES

REGULATING & FACADE ZONE PLAN

Depicting Rights-of-Ways, Open Space, and Development Blocks

The Hazelwood Flats Regulating Plan depicts the three primary district systems: **Rights-of-Way, Open Space, and Development Blocks.**

- ▶ **Rights-of-Way** describe locations where the building interface at the right-of-way activates the public realm. Additional information is provided in Section 2.1.
- ▶ **Open Space** describes neighborhood park spaces within each sub-district. Additional information is provided in Section 2.2.
- ▶ **Development Blocks** refers to the land area available for building development.

- | | | | |
|---|-------------------|---|---------------------------|
|  | Common Open Space |  | Sub-District |
|  | Building Area |  | Property Line |
|  | Facade Zone |  | Almono Site Property Line |
|  | Civic Facade Zone |  | Block Designation |
|  | Primary Street | | |
|  | Secondary Street | | |
|  | Way | | |

Refer to Section 2.3 - 53 for expanded definitions of terms.
Final Block subdivision shall be defined within the FLDP submission.

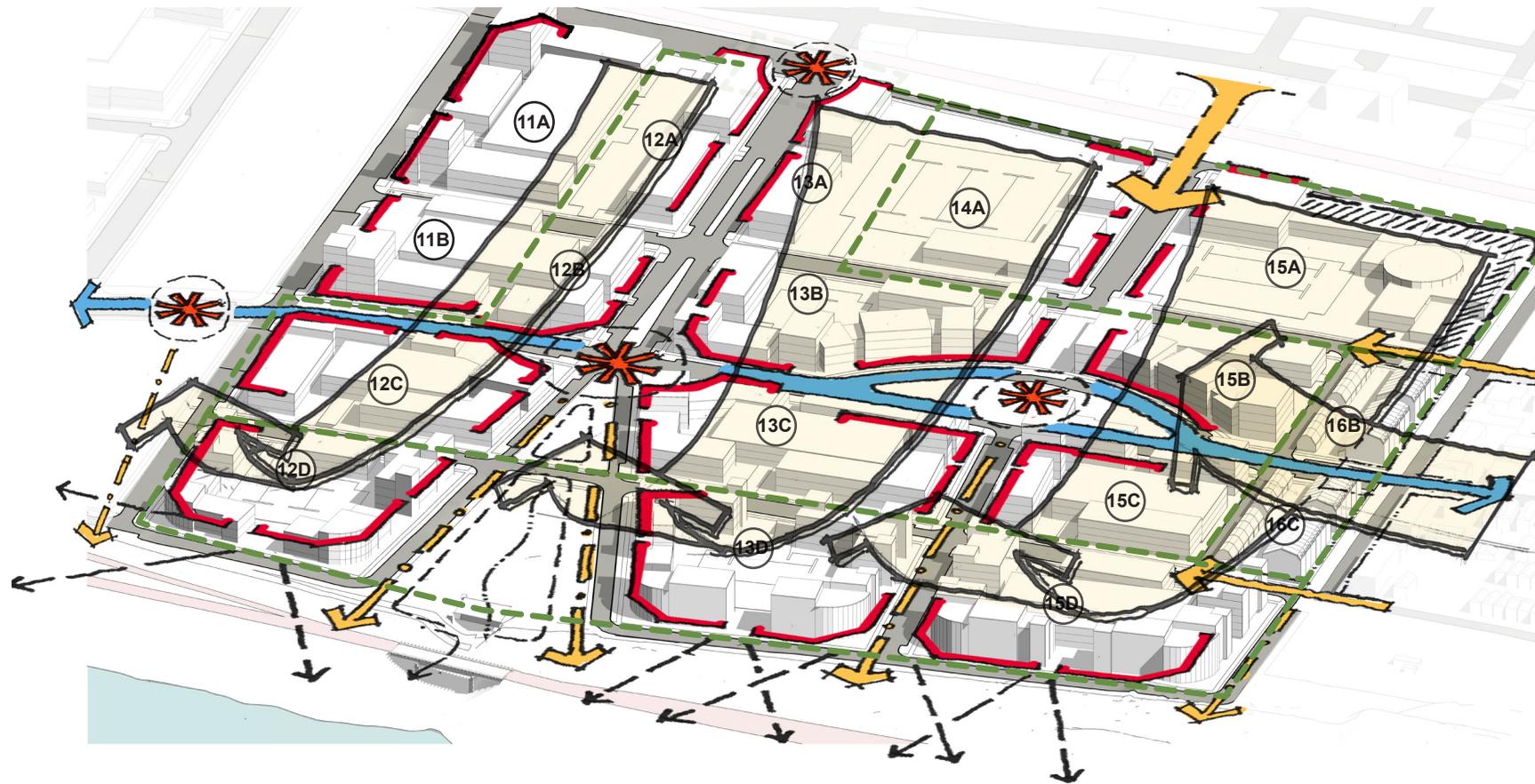


SITE FORCES

A Connected Mixed-Use Neighborhood

Hazelwood Flats is a high density mixed-use district that aims to provide housing and amenities for the breadth of the population. A range of housing options will welcome a diversity of residents, open spaces will restore the native ecology, and street-level neighborhood

services will activate community spaces. Connected to the existing Hazelwood street grid, the sub-districts of this walkable neighborhood allows people to access the riverfront, open spaces, local businesses, and their places of work.



HF MIXED-USE

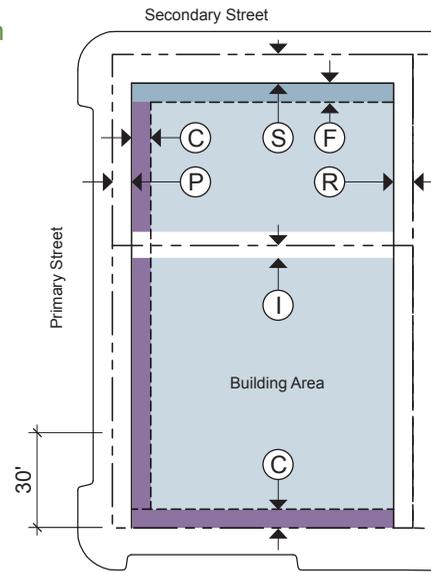
Building Placement Intent

- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are always located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from Primary Streets.

Lot Diagram



FRONTAGES

Permitted Frontage Types

Porch
Stoop
Terrace
Forecourt
Commercial / Shopfront

Permitted Frontage Types in Civic Zones

Terrace
Forecourt
Commercial / Support

BUILDING PLACEMENT

Building Setbacks From Property Line

P	Primary Street (max.)	10'
	Second Avenue (max.)	10'
	Signature Boulevard (max.)	5'
S	Secondary Street (max.)	10'
I	Interior (min.)	0'
R	Rear (adjacent to way / subdivision line)	0' / 6'

Facade Zone Depth From Setback Line

F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	5'

Facade Built within Facade Zone

	Primary Street (min.)	80%
	Secondary Street (min.)	45%
	Civic Facade Zone (min.)	90%

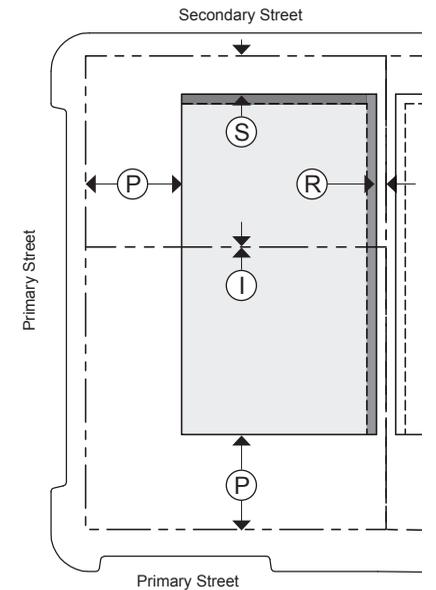
Parking Placement Intent

- Promote a comprehensive district-wide approach parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of shared parking between adjacent parcels.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.

Applicable to Parking Placement & Access

- The primary street setback encourages the placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The interior setback encourages shared parking areas between adjacent parcels with shared drive aisles between lots.
- The secondary street structured parking setback is intended to reserve future liner building development opportunities.
- Parking Placement is required to start at the Second Avenue setback.
- Limited access drives are permitted from primary streets and shall be limited to two per block.
- Off-street surface parking is prohibited between street and street-facing building facade.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



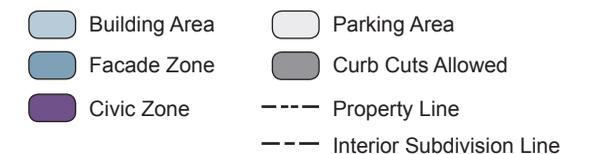
PARKING PLACEMENT & ACCESS

Parking Setbacks

P	Primary Street (min.)	50'
S	Secondary Street (surface / structured)	10' / 30'
I	Interior (surface / structured)	0' / 20'
R	Rear (adjacent to way / subdivision line)	5' / 5'

Required Spaces

Refer to Zoning Code, Chapter 914 for requirements.



Applicable to Building Height & Articulation

Pedestrian Access

- Entrance spacing requirements are to be met per building. Entrances on adjacent buildings on the same block are not applicable.
- A corner entrance meets the street-facing entrance requirements.
- An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

Parking

- Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

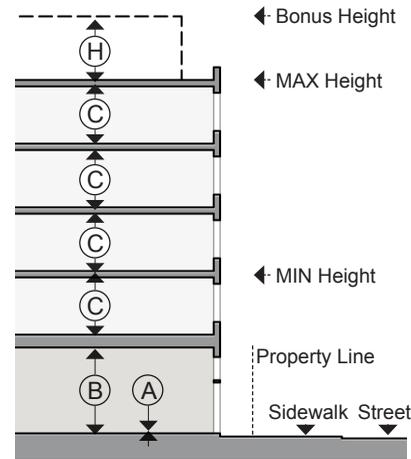
Incentives

- Height bonus permitted for LEED-Silver minimum certified buildings subject to 915.04.F.
- A height bonus is available for developments including a minimum of 15% Affordable Housing. Developers are responsible to provide sufficient documentation, determined by the Zoning Administrator, as binding evidence of compliance with the parameters of affordable housing in order to receive the density bonus.

Affordable Housing as defined and amended by the Department of Housing and Urban Development provides rental units for households that cost no more than 30% of its annual income. Affordable for sale housing will have an initial purchase price that does not exceed 95% of the median purchase price for the area as determined by the Secretary of HUD.

- Lot coverage increase permitted for structured parking. Structures will comply with setback guidelines.

Height Diagram



District Intent Diagram



BUILDING HEIGHT & ARTICULATION	
Building Height	
Building Height (min.)	2 stories
Building Height (max.)	5 stories
Building Height (bonus)	2 additional stories
Story Height	
A Ground Floor Elevation (min. - max.)	
Residential / Non-residential	2' - 4' / 0" - 6"
B Ground Story Height, Floor to Ceiling (min. / min. - max.)	
Residential / Non-residential	9' / 12' - 15'
C Upper Story Height, Floor to Ceiling (min.)	8'
Building Form	
Street-Facing Wall Length w/o Offset (max.)	100'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	8'
Building Length Street-Facing Facade (max.)	120'

TRANSPARENCY (Clear glass facades)	
Ground Story	
Primary / Secondary Streets (min.)	20% / 20%
Upper Story	
Street Facing Facade (min.)	20%
Non-Residential, Primary / Secondary Street between 3 and 8 feet above grade	60% / 30%
Blank Wall Area, Primary / Secondary Street (max)	35' / 45'
Pedestrian Access / Distance Between Entries	
Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'
Distance between Upper Floor Entrances along Primary Street (max)	75'

COVERAGE		
#	Block Acreage	Coverage Block & Lot
11A	2.3	60-90%
11B	1.3	60-90%
12A	1.5	60-90%
12B	.8	60-90%
12C	1.9	60-90%
13A	1.6	60-90%
13B	2.6	60-90%
13C	2.3	60-90%
15B	1.5	60-90%
15C	1.6	60-90%

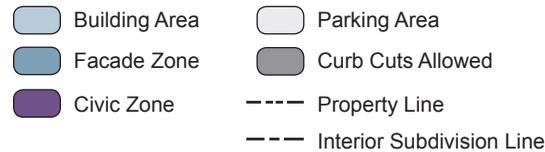
HF FLEX

Building Placement Intent

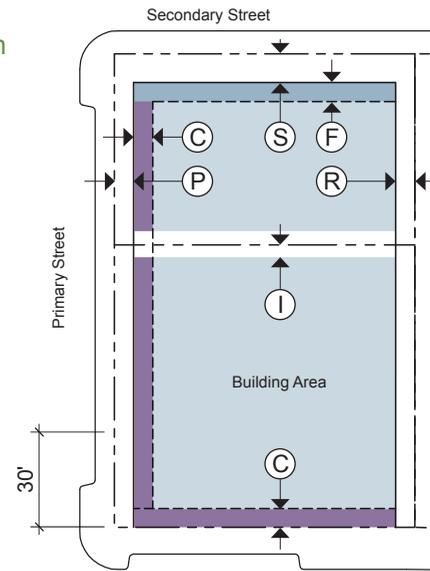
- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are always located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from Primary Streets.



Lot Diagram



BUILDING PLACEMENT

Building Setbacks From Property Line		
P	Primary Street (max.)	10'
	Second Avenue (max.)	10'
S	Secondary Street (max.)	15'
I	Interior (min.)	6'
R	Rear (adjacent to way / subdivision line)	0' / 5'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	5'
Facade Built within Facade Zone		
	Primary Street (min.)	60%
	Secondary Street (min.)	30%
	Civic Facade Zone (min.)	90%

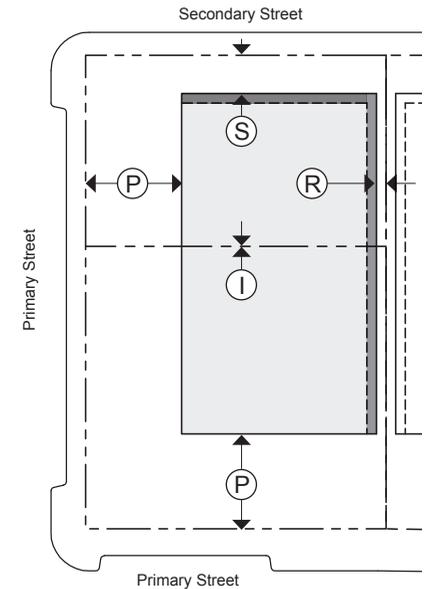
Parking Placement Intent

- Promote a comprehensive district-wide approach parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of shared parking between adjacent parcels.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.

Applicable to Parking Placement & Access

- The primary street setback encourages the placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The interior setback encourages shared parking areas between adjacent parcels with shared drive aisles between lots.
- The secondary street structured parking setback is intended to reserve future liner building development opportunities.
- Limited access drives are permitted from primary streets and shall be limited to two per block.
- Off-street surface parking is prohibited between street and street-facing building facade.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



PARKING PLACEMENT & ACCESS

Parking Setbacks (min.)		
P	Primary Street	20'
S	Secondary Street (surface / structured)	10' / 30'
I	Interior (surface / structured)	5' / 10'
R	Rear (adjacent to way / subdivision line)	5' / 5'

Required Spaces

Refer to Zoning Code, Chapter 914 for requirements.

Applicable to Building Height & Articulation

Pedestrian Access

1. Entrance spacing requirements are to be met per building. Entrances on adjacent buildings on the same block are not applicable.
2. A corner entrance meets the street-facing entrance requirements.
3. An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

Parking

1. Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

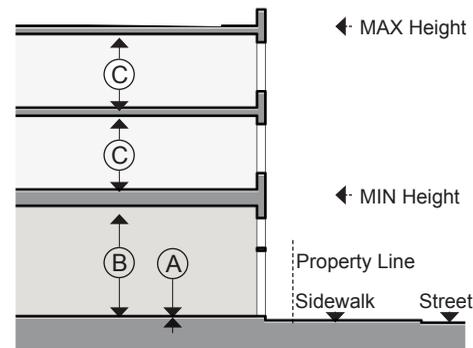
Incentives

1. Height bonus permitted for LEED-Silver minimum certified buildings subject to 915.04.F.
2. A height bonus is available for developments including a minimum of 15% Affordable Housing. Developers are responsible to provide sufficient documentation, determined by the Zoning Administrator, as binding evidence of compliance with the parameters of affordable housing in order to receive the density bonus.

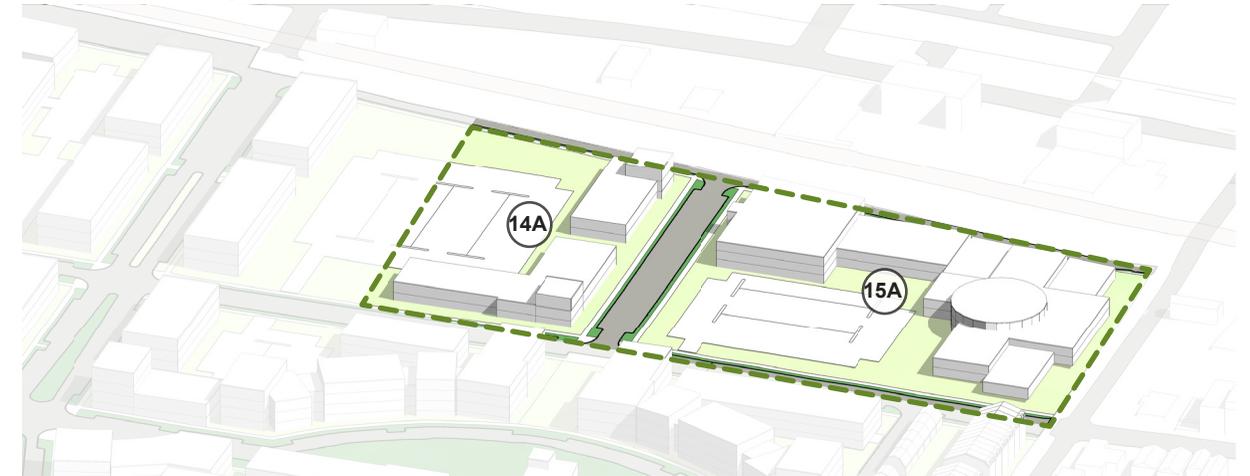
Affordable Housing as defined and amended by the Department of Housing and Urban Development provides rental units for households that cost no more than 30% of its annual income. Affordable for sale housing will have an initial purchase price that does not exceed 95% of the median purchase price for the area as determined by the Secretary of HUD.

3. Lot coverage increase permitted for structured parking. Structures will comply with setback guidelines.

Height Diagram



District Intent Diagram



BUILDING HEIGHT & ARTICULATION

Building Height		
Building Height (min.)	1 story / 20'	
Building Height (max.)	3 stories	
=\	1 story	
Story Height		
A	Ground Floor Elevation (min. - max.)	
	Residential / Non-residential 2' - 4' / 0" - 6"	
B	Ground Story Height, Floor to Ceiling (min. / min. - max.)	
	Residential / Non-residential 9' / 12' - 15'	
C	Upper Story Height, Floor to Ceiling (min.)	8'
Building Form		
Street-Facing Wall Length w/o Offset (max.)	100'	
Street-Facing Wall Offset Depth (min.)	4'	
Street-Facing Wall Offset Length (min.)	8'	
Building Length Street-Facing Facade (max.)	120'	

Transparency (Clear glass facades)

Ground Story	
Primary / Secondary Streets (min.)	40% / 20%
Upper Story	
Street Facing Facade (min.)	20%
Non-Residential, Primary / Secondary Street between 3 and 8 feet above grade	60% / 30%
Blank Wall Area, Primary / Secondary Street (max)	35' / 45'

Pedestrian Access / Distance Between Entries

Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'

FRONTAGES

Permitted Frontage Types	
Common Lawn	
Terrace	
Forecourt	
Commercial / Shopfront	
Permitted Frontage Types in Civic Zones	
Commercial / Shopfront	

COVERAGE

#	Block		Coverage
	Acreage	Block & Lot	
14A	2.5		50-80%
15A	3.6		50-80%

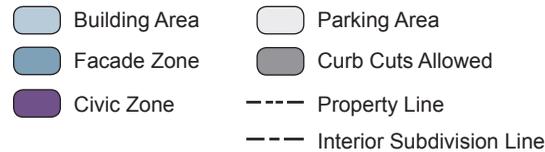
HF RESIDENTIAL A

Building Placement Intent

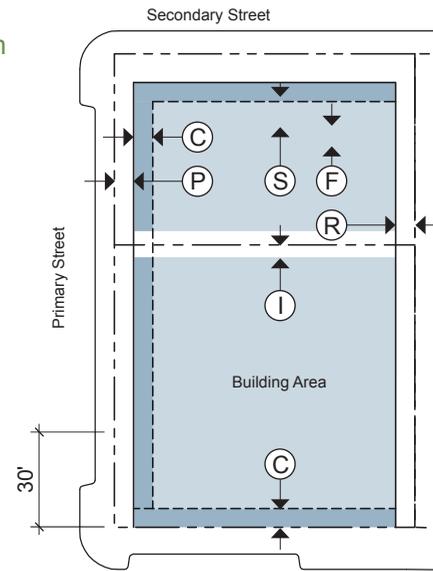
- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are always located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from Primary Streets.



Lot Diagram



BUILDING PLACEMENT

Building Setbacks From Property Line		
P	Primary Street (max.)	10'
S	Secondary Street (max.)	15'
I	Interior (min.)	6'
R	Rear (adjacent to way / subdivision line)	5' / 5'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	15'
Facade Built within Facade Zone		
	Primary Street (min.)	70%
	Secondary Street (min.)	30%

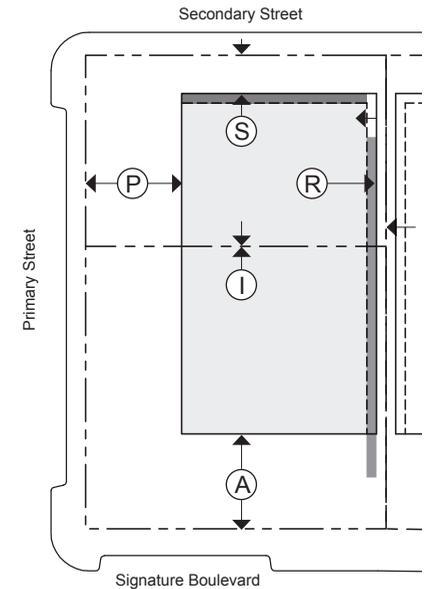
Parking Placement Intent

- Promote a comprehensive district-wide approach parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of **shared parking between adjacent parcels**.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.

Applicable to Parking Placement & Access

- The primary street setback encourages the placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- Limited access drives are permitted from primary streets. Such drives shall be limited to one per block.
- Off-street surface parking is prohibited between street and street-facing building facade.

Lot Diagram



PARKING PLACEMENT & ACCESS

Parking Setbacks (min.)		
P	Primary Street	30'
A	Signature Boulevard (min.)	15'
S	Secondary Street (min.)	10'
I	Interior	0'
R	Rear (adjacent to way / subdivision line)	5' / 5'

Required Spaces

Refer to Zoning Code, Chapter 914 for requirements.

Applicable to Building Height & Articulation

Pedestrian Access

1. Entrance spacing requirements are to be met per building. Entrances on adjacent buildings on the same block are not applicable.
2. A corner entrance meets the street-facing entrance requirements.
3. An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

Parking

1. Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

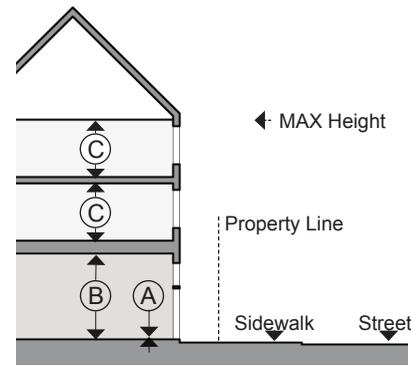
Incentives

1. Height bonus permitted for LEED-Silver minimum certified buildings subject to 915.04.F.
2. A height bonus is available for developments including a minimum of 15% Affordable Housing. Developers are responsible to provide sufficient documentation, determined by the Zoning Administrator, as binding evidence of compliance with the parameters of affordable housing in order to receive the density bonus.

Affordable Housing as defined and amended by the Department of Housing and Urban Development provides rental units for households that cost no more than 30% of its annual income. Affordable for sale housing will have an initial purchase price that does not exceed 95% of the median purchase price for the area as determined by the Secretary of HUD.

3. Lot coverage increase permitted for structured parking. Structures will comply with setback guidelines.

Height Diagram



District Intent Diagram



BUILDING HEIGHT & ARTICULATION

Building Height	
Principal Building (max.)	3 stories
Detached Garage (max.)	25'

Story Height

A	Ground Floor Elevation (min. - max.)	
	Residential / Non-residential	2' - 4' / 0" - 6"
B	Ground Story Height, Floor to Ceiling (min. / min. - max.)	
	Residential / Non-residential	9' / 12' - 15'
C	Upper Story Height, Floor to Ceiling (min.)	8'

Building Form

Number of Dwelling Units permitted in a single continuous row (max.)	7
--	---

Transparency (Clear glass facades)

Ground Story, Primary / Secondary Streets (min.)	20% / 20%
Upper Story, Street Facing Facade (min.)	20%
Non-Residential, Primary / Secondary Street between 3 and 8 feet above grade	60% / 30%

Blank Wall Area, Primary / Secondary Street (max)	35' / 45'
---	-----------

Pedestrian Access / Distance Between Entries

I Entrance Facing Primary Street / Common Open Space	REQD.
--	-------

FRONTAGES

Permitted Frontage Types

Common Lawn
Porch
Stoop
Commercial / Shopfront

COVERAGE

#	Block	
	Acreage	Coverage Block & Lot
16B	.7	60-80%
16C	.7	60-80%

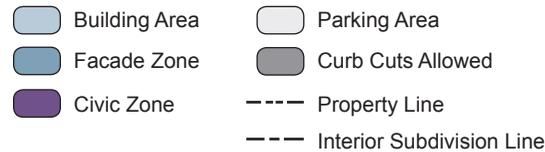
HF RESIDENTIAL B

Building Placement Intent

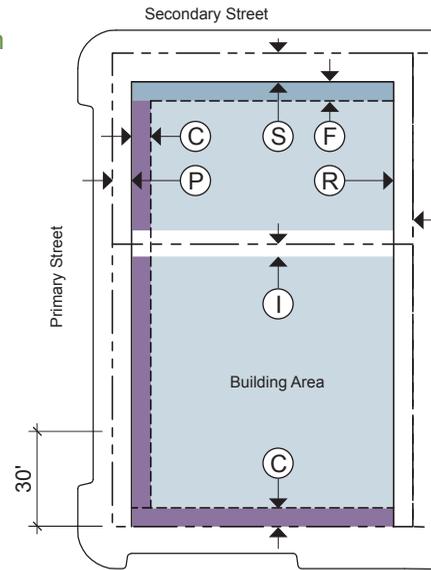
- To encourage a vibrant streetscape where building form connects interior uses with exterior activity.

General Notes Applicable to All Zones

- On corner lots, the street facade must be built to the Facade Zone along the first 30' on both streets.
- Unless otherwise noted on the Regulating and Facade Zone Plan, Civic Zones are always located on Primary Streets.
- Final Development Block and Interior parcel subdivision lines shall be defined through the FLDP submission process.
- Any portion of the Facade Zone on Primary Streets not defined by a building must be defined by landscape planting.
- Loading docks, overhead doors, and other service items shall not be visible from Primary Streets.



Lot Diagram



BUILDING PLACEMENT

Building Setbacks From Property Line		
P	Primary Street (max.)	10'
	Hazelwood Avenue (max.)	10'
S	Secondary Street (max.)	15'
I	Interior (min.)	6'
R	Rear (adjacent to way / subdivision line)	0' / 5'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	5'
Facade Built within Facade Zone		
	Primary Street (min.)	70%
	Secondary Street (min.)	35%
	Civic Facade Zone (min.)	90%

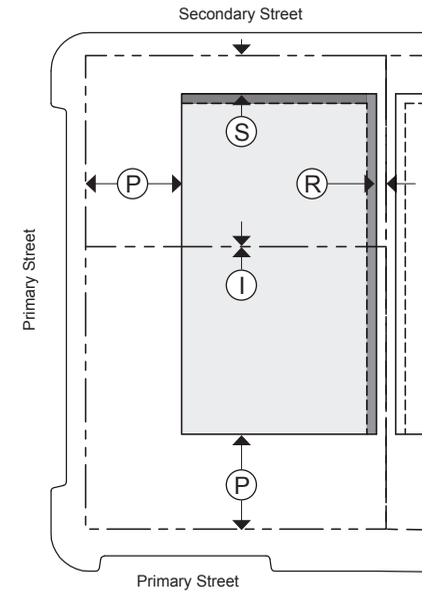
Parking Placement Intent

- Promote a comprehensive district-wide approach parking requirements that reflects the range of operating hours of mixed-use districts and to encourage a "park once, visit multiple" strategy of **shared parking between adjacent parcels**.
- Promote a comprehensive district-wide approach that encourages bicycle parking facilities and infrastructure.

Applicable to Parking Placement & Access

- The primary street setback encourages the placement of the building footprint in defining the public realm.
- The secondary street setback locates parking farther back than the building facade.
- The interior setback encourages shared parking areas between adjacent parcels with shared drive aisles between lots.
- Limited access drives are permitted from primary streets. Such drives shall be limited to one per block.
- Off-street surface parking is prohibited between street and street-facing building facade.
- Shared parking and drives are encouraged to reduce curb cuts along the street.
- Provide bicycle parking & storage per currently adopted LEED-ND credit minimums. Refer to City of Pittsburgh Zoning Code Chapter 914 for additional requirements & incentives.
- Development Blocks may be utilized for interim surface parking until market demand warrants structured facilities.

Lot Diagram



PARKING PLACEMENT & ACCESS

Parking Setbacks		
P	Primary Street (surface / structured)	30' / 50'
S	Secondary Street (surface / structured)	10' / 30'
I	Interior (surface / structured)	0' / 10'
R	Rear (adjacent to way / subdivision line)	5' / 5'
Required Spaces		
Refer to Zoning Code, Chapter 914 for requirements.		

Applicable to Building Height & Articulation

Pedestrian Access

1. Entrance spacing requirements are to be met per building. Entrances on adjacent buildings on the same block are not applicable.
2. A corner entrance meets the street-facing entrance requirements.
3. An entrance must be operable by building users and provide ingress and egress to meet the intent of street-facing requirements.

Parking

1. Parking structures fronting primary streets, secondary streets, or common open space shall provide visual interest, promote street level activity, and relate in size, scale, bulk, and design with primary structures. Parking structures should look like primary structures rather than utilitarian parking structures.

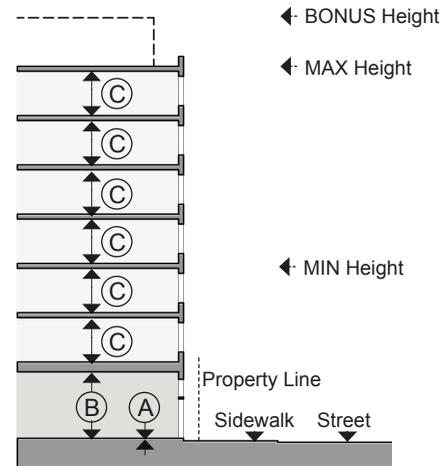
Incentives

1. Height bonus permitted for LEED-Silver minimum certified buildings subject to 915.04.F.
2. A height bonus is available for developments including a minimum of 15% Affordable Housing. Developers are responsible to provide sufficient documentation, determined by the Zoning Administrator, as binding evidence of compliance with the parameters of affordable housing in order to receive the density bonus.

Affordable Housing as defined and amended by the Department of Housing and Urban Development provides rental units for households that cost no more than 30% of its annual income. Affordable for sale housing will have an initial purchase price that does not exceed 95% of the median purchase price for the area as determined by the Secretary of HUD.

3. Lot coverage increase permitted for structured parking. Structures will comply with setback guidelines.

Height Diagram



District Intent Diagram



BUILDING HEIGHT & ARTICULATION

Building Height	
Building Height (min.)	3 stories
Building Height (max.)	7 stories
Building Height (bonus)	1 additional story

Story Height		
A	Ground Floor Elevation (min. - max.)	
	Residential / Non-residential 2' - 4' / 0" - 6"	
B	Ground Story Height, Floor to Ceiling (min. / min. - max.)	
	Residential / Non-residential 9' / 12' - 15'	
C	Upper Story Height, Floor to Ceiling (min.)	8'

Building Form	
Street-Facing Wall Length w/o Offset (max.)	100'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	8'
Building Length Street-Facing Facade (max.)	120'

Transparency (Clear glass facades)

Ground Story, Primary / Secondary Streets (min.)	20% / 20%
Upper Story, Street Facing Facade (min.)	20%
Non-Residential, Primary / Secondary Street between 3 and 8 feet above grade	60% / 30%

Blank Wall Area, Primary / Secondary Street (max)	35' / 45'
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Pedestrian Access / Distance Between Entries

Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'

FRONTAGES

Permitted Frontage Types	
Common Lawn	
Porch	
Stoop	
Terrace	
Forecourt	
Commercial / Shopfront	

COVERAGE

#	Block	Coverage
	Acreage	Block & Lot
12D	2.1	70-90%
13D	2.4	70-90%
15D	2.5	70-90%

OPEN SPACE GUIDELINES

Describing the Open Space and Riverfront Locations

Buildings and structures located within open space promote economic development and healthier communities by providing activities, events, and services that attract a diverse range of users.

These guidelines are intended to place parameters on buildings and structures within Almono open space subdistricts and are applicable to Riverview, Smart Site Central Green, and Eco-Tech Park Districts. Development may occur within three different scenarios: open space enhanced uses, water enhanced uses, and water oriented uses.

Potential open space oriented uses may include structures and facilities such as full service restaurants, food and retail serving kiosks, restroom facilities, and recreation buildings that serve local and regional users.

Water enhanced uses are located within the Riverfront Overlay District and may include commercial, recreational, and tourist driven uses that capitalize on trail and riverfront activities. Water oriented uses include uses and facilities related to riverfront industry and may include staging and river-to-rail transfer structures.

Open space and water enhanced development should be located where building facades and frontages simultaneously address and engage the public realm of the street, the open space, and the riverfront in creating a walkable and active built environment. Sensitivity to locating service functions in a discreet, well integrated, and screened manner shall be considered.

Refer to District Regulating and Facade Zone Plans for additional information.



Restaurant fronting the lawn at Schenley Plaza



Restaurant fronting the sidewalk along Pennant Place



Cafe at the Point in Point State Park

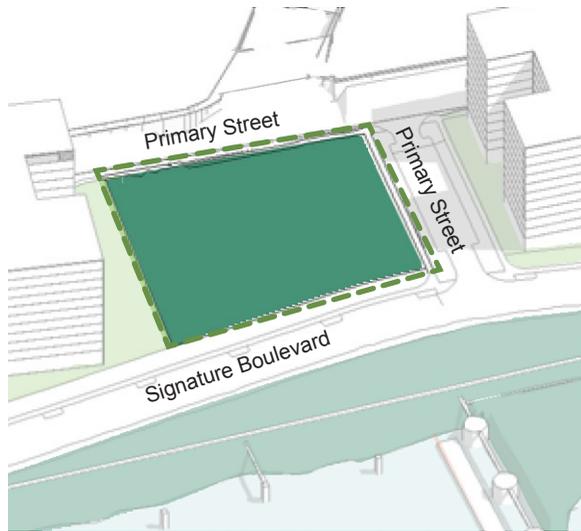
© Pfaffmann + Associates

Define Open Space Commercial buildings, recreational centers, restaurants, and similar uses should be located to define a relationship between the building facade and open space. The building above establishes an interior program that takes advantage of its location adjacent to passive open space by providing operable facades and outdoor seating.

Define the Public Realm Almono common open spaces are important components in contributing to the public realm. Building facades should define the public realm through interior / exterior relationships and pedestrian activity.

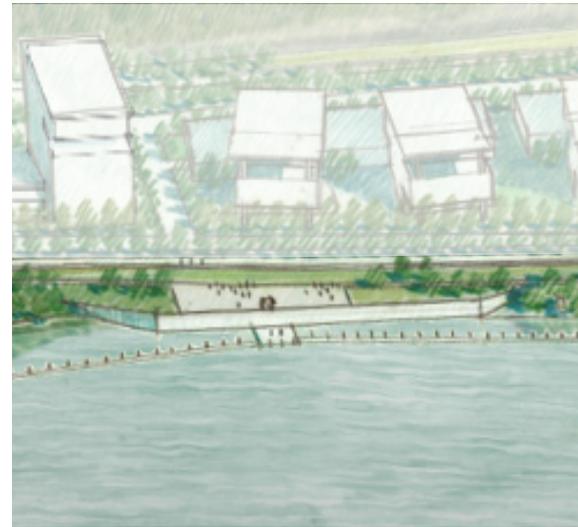
Civic Art Open space structures - large and small - provide opportunities to create acts of civic art that celebrate the history of place and role of open space in contributing to an active public realm.

Open Space and Riverfront Guidelines



Open Space Enhanced

Potential for restaurants, kiosks, and other local and regional tourist and service oriented users in a plaza environment



Water Enhanced

Potential for commercial and recreational oriented uses that capture the proximity to the riverfront



Open Space Enhanced

Potential for commercial and recreational facilities that take advantage of regionally oriented active open space



Water Oriented

Potential for commercial facilities that take advantage of riverfront infrastructure and river-to-rail capabilities

BUILDING PLACEMENT

Building Setbacks From Property Line

Primary Street (min. - max.)	10' - 20'
Signature Boulevard (max.)	5' - 10'
Secondary Street (max.)	20'
Interior (min.)	5'
Rear (adjacent to subdivision line or river)	20'

Facade Zone Depth From Setback Line

Facade Zone Depth	10'
-------------------	-----

Facade Built within Facade Zone

Primary Street (min. - max.)	80% - 90%
Secondary Street (min.)	45%

BUILDING HEIGHT & ARTICULATION

Building Height

Building Height (min.)	1 stories
Building Height (max.)	2 stories

Building Form

Street-Facing Wall Length w/o Offset (max.)	50'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	8'
Building Length Street-Facing Facade (max.)	120'

Transparency (Clear glass facades)

Ground Story	
Primary / Secondary Streets (min.)	60% / 30%
Upper Story	
Street Facing Facade (min.)	20%
Blank Wall Area, Primary / Secondary Street (max)	35' / 45'

Pedestrian Access / Distance Between Entries

Entrance Facing Primary Street / Common Open Space	REQD.
--	-------

FRONTAGES AND LOT SIZE

Permitted Frontage Types

Porch
Terrace
Shopfront Commercial

Legend

- Common Open Space
- Almono Site Property Line
- Parcel Open Space
- District Boundary

Key Plan



FRONTAGES

How buildings connect to and activate the public realm

These standards expand upon and supplement the standards prescribed within the Regulating and Facade Zone Plan and the Building Articulation standards.

Landscape design and character is a key component of Frontage composition. Refer to Section 3.2 for additional information and requirements.



COMMON LANDSCAPE

Intent	
The Facade of the building is setback from the lot line, creating a visually continuous common landscape with adjacent yards.	
Landscape Dimensions	
Depth	10' min.
First Floor Elevation	5' max. above grade
Applicability	
Provides a landscape buffer between the street and ground floor multi-family residential uses.	
Miscellaneous	
The front yard created is unfenced between the sidewalk and yard and between adjacent front yards except where a common continuous fence, wall, or hedge unifies an entire block.	
May be used in collaboration with other Frontages, including porches and stoops that promote street activity.	
Porch may project or be recessed.	
Landscaping adjacent to building must be consistent with guidelines outlined in Section 3.2.	



PORCH

Intent	
The Facade of the building has a small to medium setback from the lot line. The projecting porch is located behind the setback line and within the Facade Zone.	
Porch Dimensions	
Porch Depth	8' min.
Width	10' min.
Height	2 stories max.
Applicability	
Provides semi-private outdoor space between the private area of the main building and public area of the right-of-way.	
Miscellaneous	
May be used in collaboration with other Frontages.	
The resulting front yard is typically small and defined by landscape to maintain the edge of the property line.	
The porch may be open on three sides, engaged with the main building, or recessed within the main building. All habitable area of the main building is located behind the setback line.	



STOOP

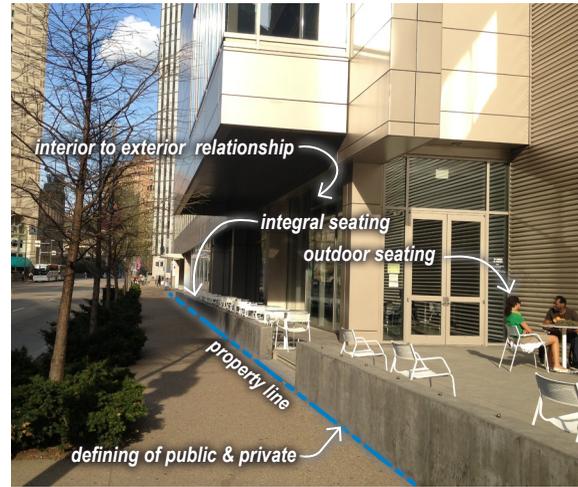
Intent
The Facade is aligned close to the lot line with the ground floor elevated sufficiently to secure privacy for windows.

Stoop Dimensions

Width	5' min. / 8' max.
Depth (not including steps / ramp)	5' min. / 8' max.
Height	18" min. / 30" max.
Depth, Recessed Entry	8' max.

Applicability
Provides an entrance, typically an exterior stair and landing, that engages the sidewalk for ground-floor residential use.

Miscellaneous
All doors shall face the street.
A stoop may be covered or recessed to provide shelter from the elements, but may not be fully enclosed.
Single family residences elevated from grade at street level shall provide a visitable entrance at rear or side of property



TERRACE

Intent
The main Facade is setback from the lot line by an elevated terrace or sunken light court that provides public circulation along the facade.

Terrace Dimensions

Depth, Clear	8' min.
Height above Sidewalk	3' max.
Distance between stairs / ramps	50' max.

Applicability
May buffer residential uses from more urban public realms by removing the private front yard from public encroachment.
The raised terrace or sunken court is suitable for outdoor commercial and retail usages, such as a cafe and may accommodate grade changes. May be with in collaboration with Shopfront / Commercial Frontage.

Miscellaneous
Low walls with integrated seating is encouraged.



FORECOURT

Intent
The main portion of the Facade is at or close to the setback line with a portion recessed, creating a small court space.

Forecourt Dimensions

Width	15' min. / 1/3 length of the building face max.
Depth, min.	15'
Section ratio, Height to Width	2:1 max

Applicability
May accommodate a vehicular drop off, entry court, shared garden, or additional retail / outdoor seating.
Typically incorporates substantial glazing with or without awnings at the sidewalk level.

Miscellaneous
Maximum of one Forecourt permitted per lot.
A Forecourt shall be included in the percentage when calculating Building Form requirements.
Solar orientation for occupant comfort and incorporation of public art or a civic landscape is encouraged.



COMMERCIAL / SHOPFRONT

Intent
The main Facade is aligned at or close to the setback line with the building orientation and entrance facing towards the public at-grade sidewalk.

Commercial / Shopfront Dimensions

Ground Floor Transparency	75%
Distance Between Glazing	30" max
Awning (if applicable)	
Depth / Height, clear	4' min / 8' min

Applicability
May be used with other frontage types.
Intended for retail uses.
Typically incorporates substantial glazing at the sidewalk level.

Miscellaneous
Entrances may be recessed up to 6' max.
Residential windows types prohibited.
Operable facades are encouraged.

Photos are advisory only and are provided to illustrate intent. They are not an endorsement of products or services

ALMONO BUILDING MATERIALS

Creating a Cohesive Character Across Districts

The selection and application of building materials are intended to relate Almono buildings to their context-specific district and sub-district locations.

Building Elevation Review

All building elevations are subject to design review by the site development association designated by Almono LP for compatibility with the neighborhood context, compliance with these guidelines and the development vision

Sustainability

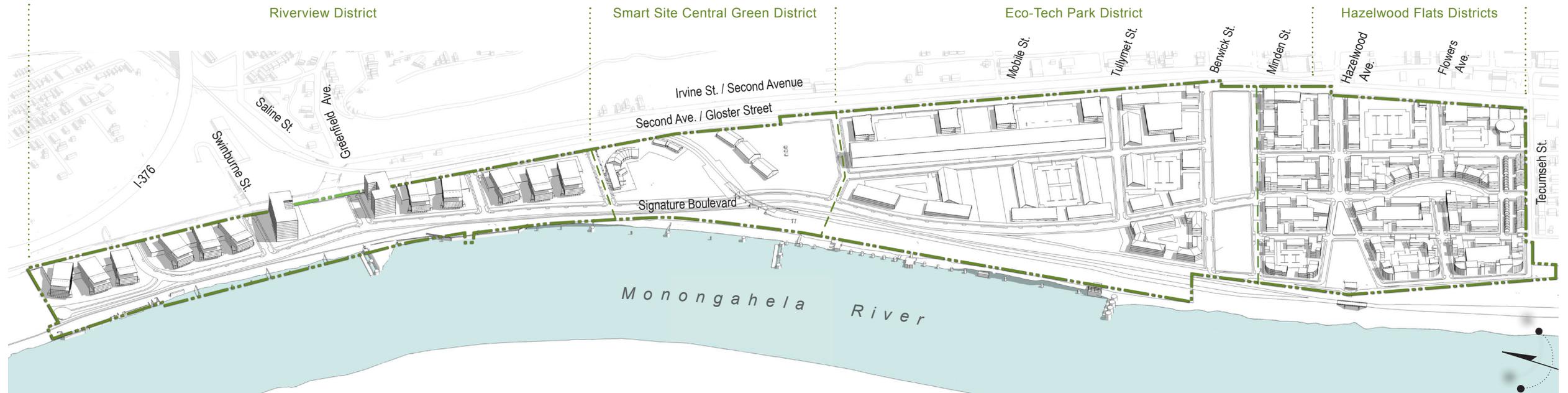
Projects shall consider green design criteria in material selection. Selection of materials that are produced locally, originate from rapidly renewable resources, or with high recycled content is encouraged.

Civic Facade Zone Requirements

A high degree of street level building articulation, special material treatment or color is encouraged to highlight entrances and emphasize the connection between interior public spaces and adjacent common or parcel open spaces.

Parking Structures

Parking structures fronting primary streets, secondary streets, or common open space shall relate in material and detail to surrounding primary land use building components.



- Almono Site Property Line
- District Boundary

Riverview District

Materials shall be contemporary and reflect an urban high-rise district that is sensitive to the streetscape. Upper floors shall utilize progressive, light-weight technologies such as metal and glass that provide for a high-level of transparency and connection to the street and riverscape. The street zone of the building may also mix in concrete and stone forms to create a pedestrian scale and building base.

1. Exterior Cladding

Primary materials that account for up to 70% of the building surface area exclusive of glazing:

- Architectural Metal Panels
- Precast Panels
- Curtain wall Systems
- Phenolic Resin / High Density Wood Panels

Secondary materials that account for up to 30% of the building surface area exclusive of glazing:

- Brick Masonry
- Natural Stone

Materials not permitted include: vinyl-based products and EIFS. Materials discouraged include: reflective glass; imitation, irregularly shaped or dry-stacked stone.

2. Glazing

- Curtain wall / Storefront Systems
- Aluminum Framed Windows

3. Roofing Material and Roofscapes

Roofscapes facing the Signature Boulevard or Open Spaces should be considered important design elements. Mechanical equipment shall be screened.

Flat roofs shall meet solar reflectance requirements of the LEED rating system applicable to project type.

Green roofs, where applicable, are encouraged.

Roofing materials, excluding flat roofs:

- Architectural Shingles
- Metal, Standing Seam

Smart Site Central Green District

Building materials should reflect its focus as a land-based, experimental district. Building facades shall be a mixture of industrial and natural, and draw upon the vernacular materials of agricultural southwestern Pennsylvania. Materials shall be simple and of a larger scale

1. Exterior Cladding

Primary materials that account for up to 70% of the building surface area exclusive of glazing:

- Architectural Metal Panels
- Precast Panels
- Natural Stone
- Phenolic Resin / High Density Wood Panels
- Cementitious or Wood Siding

Secondary materials that account for up to 30% of the building surface area exclusive of glazing:

- Standardized Brick Masonry
- Cast-In Place Concrete

Materials not permitted include: vinyl-based products and EIFS. Materials discouraged include: reflective glass; imitation stone

2. Glazing

- Curtain wall / Storefront Systems
- Aluminum Framed Windows

3. Roofing Material

Flat roofs shall meet solar reflectance requirements of the LEED rating system applicable to project type.

Green roofs, where applicable, are encouraged.

Roofing materials, excluding flat roofs:

- Architectural Shingles
- Metal, Standing Seam

Eco-Tech Park District

Materials transition from the contexts of Hazelwood Flats and Smart Site Central Green. Mixed Use sub-district should use the primary materials of Hazelwood Flats, with flexibility for contemporary expression. Signature Boulevard buildings relate to the pedestrian with visual interest at the street level and continue materials of Hazelwood Flats as a secondary material. Light Industrial sub-district shall use larger, planar materials that recalls the site's industrial heritage.

1. Exterior Cladding

Primary materials that account for 70% of the building surface area exclusive of glazing:

Refer to Smart Site Central Green and Hazelwood Flats Primary Materials for sub-district application. Additional permitted materials include:

- Metal panels
- Translucent Panels

Secondary materials that account for up to 30% of the building surface area exclusive of glazing:

Refer to Smart Site Central Green and Hazelwood Flats Secondary materials for sub-district application.

Materials not permitted include: vinyl-based products and EIFS. Materials discouraged include: reflective glass; imitation, irregularly shaped stone.

2. Glazing

- Curtain wall / Storefront Systems
- Aluminum Framed Windows
- Punched Window Openings

3. Roofing Material and Roofscapes

Roofscapes facing the Signature Boulevard or Open Spaces should be considered important design elements. Mechanical equipment shall be screened.

Flat roofs shall meet solar reflectance requirements of the LEED rating system applicable to project type.

Green roofs, where applicable, are encouraged.

Roofing materials, excluding flat roofs:

- Architectural Shingles
- Metal, Standing Seam

Hazelwood Flats District

Materials consider and relate to the range of primary material and color choices in the adjacent Hazelwood neighborhood. The primary material and color choices will be more contextual and connect the district to its surroundings, while secondary materials will allow for building expression through contemporary accents.

1. Exterior Cladding

Primary materials that account for 70% of the building surface area exclusive of glazing:

- Cementitious or Wood Siding
- Natural Stone
- Standardized Brick Masonry

Secondary materials that account for up to 30% of the building surface area exclusive of glazing:

- Cast-In Place Concrete, Polished
- Architectural Metal Panels
- Phenolic Resin / High Density Wood Panels

Materials not permitted include: vinyl-based products and EIFS. Materials discouraged include: reflective glass; imitation, irregularly shaped or dry-stacked stone.

2. Glazing

- Curtain wall / Storefront Systems
- Aluminum Framed Windows
- Punched Window Openings

3. Roofing Material

Flat roofs shall meet solar reflectance requirements of the LEED rating system applicable to project type.

Green roofs, where applicable, are encouraged.

Roofing materials, excluding flat roofs:

- Architectural Shingles
- Metal, Standing Seam

SAMPLE DEVELOPMENT SITE

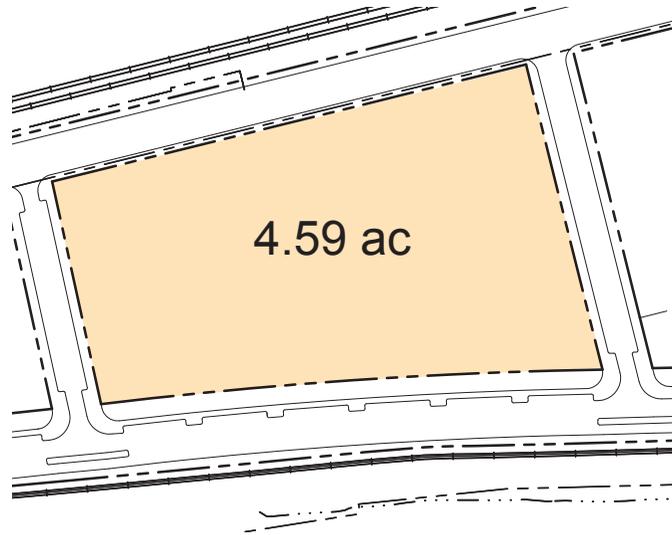
Riverview District PLDP Regulation Plan - Block 5A Example

STEP 1: Select your block

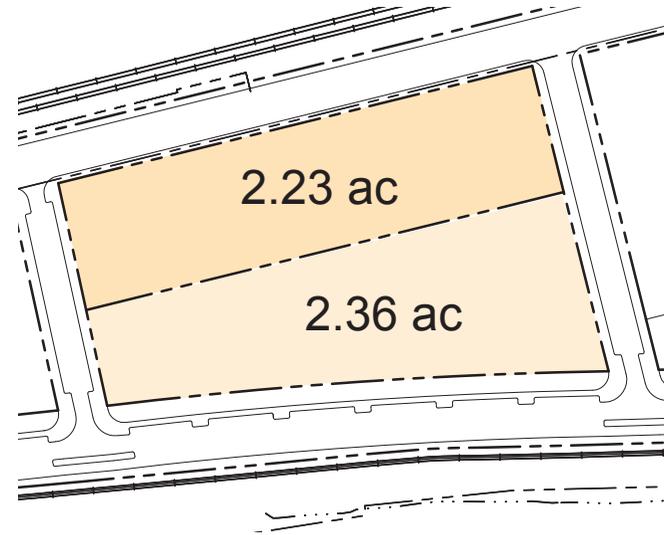


BREAKING DOWN A BLOCK

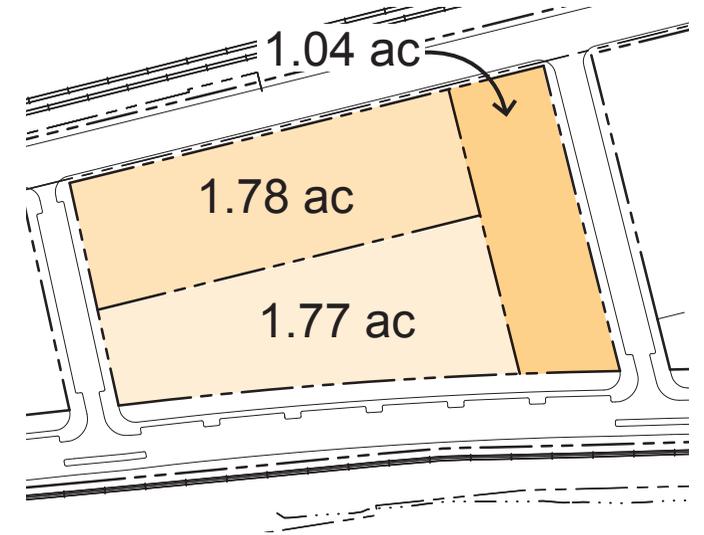
STEP 2: Establish the lot size



A Single Lot

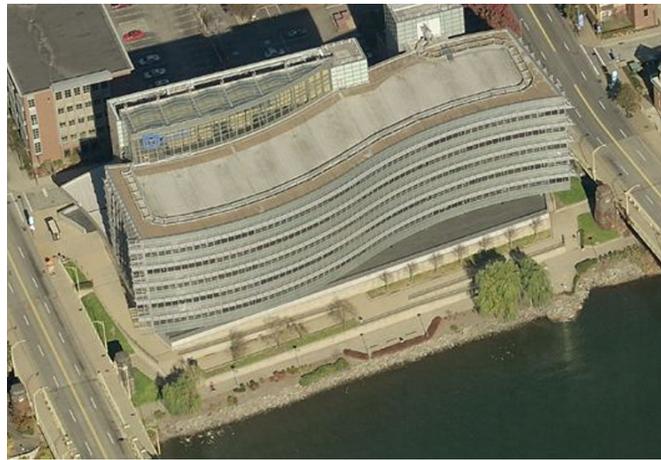


B Subdivision, Two Lots



C Subdivision, Multiple Lots

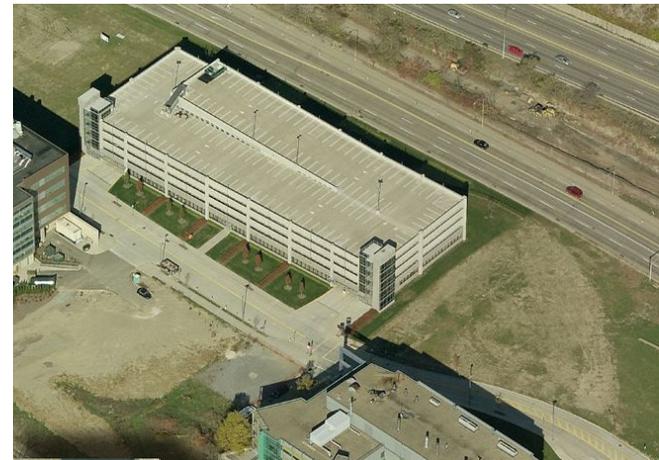
BLOCK DEVELOPMENT TYPES



A Single Lot

Alcoa Building North Side

	Building
Lot Size	1.4 acres
Lot Coverage	81%
Footprint	330 x 150'
Height	6 stories
Area	243,000 GSF
Parking Spaces	320 EST.



B Subdivision, Two Lots

Pittsburgh Technology Center South Oakland

	Building	Parking Structure
Lot Size	1.29 acres	1.45 acres
Lot Coverage	32%	65%
Footprint	20,175 sf	340 x 120'
Height	6 stories	5 levels
Area	80,000 GSF	-
Parking Spaces	-	715



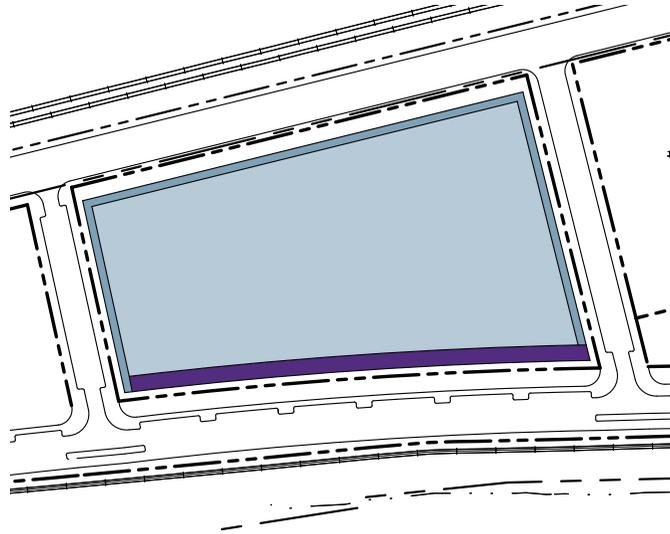
C Subdivision, Multiple Lots

South Side Works South Side Flats

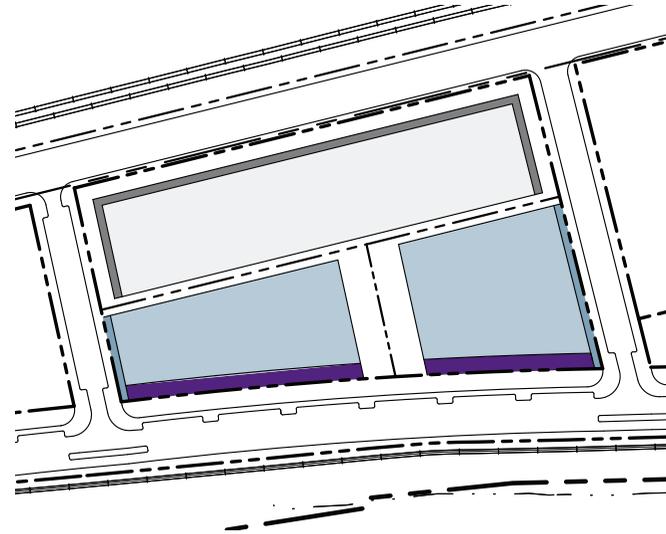
	Office Building	Mixed-Use Building	Parking Structure
Lot Size	1.39 acres	.35 acres	1.08 acres
Lot Coverage	62%	92%	95%
Footprint	300 x 125'	70 x 200'	200 x 250'
Height	3 stories	3 stories	4 levels
Area	160,000 GSF	42,000 GSF	-
Parking Spaces	-	-	363

SETBACK CONSTRAINTS

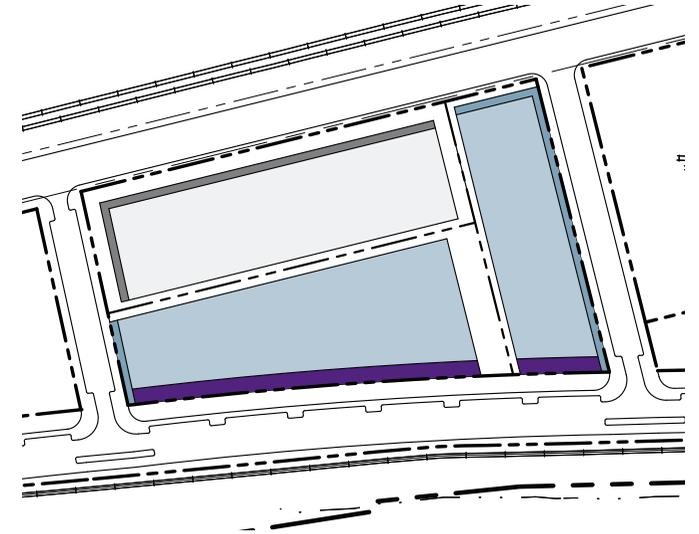
STEP 3: Establish setbacks per guidelines



A Single Lot



B Subdivision, River-Facing

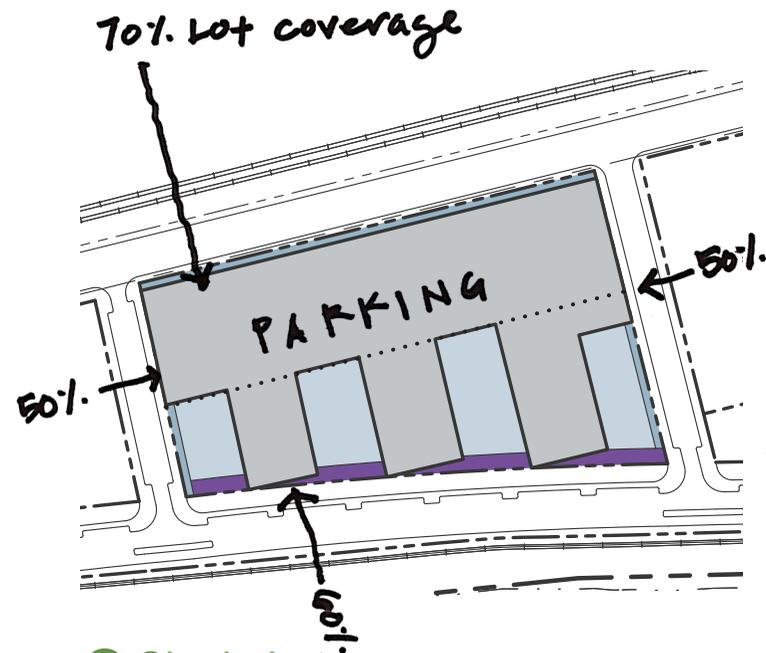


C Subdivision, End Grain

BUILDING PLACEMENT

STEP 4: Review regulations that impact building form

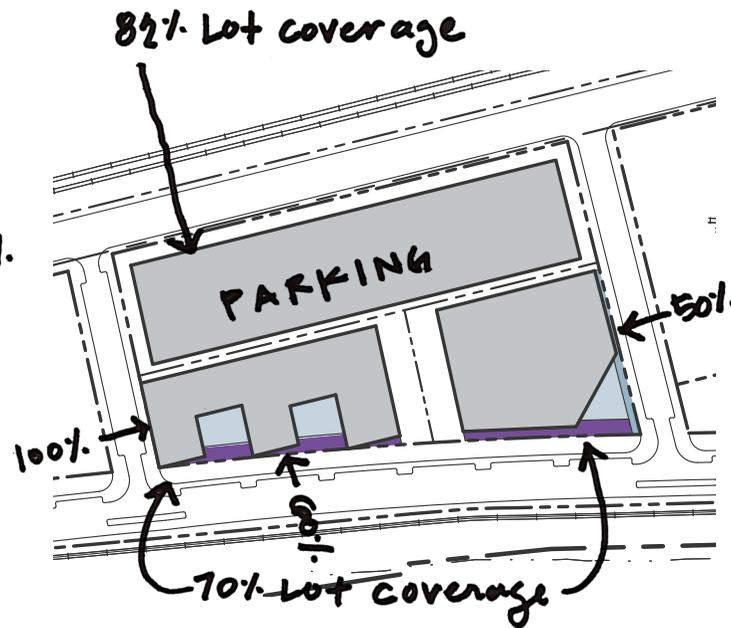
- ▶ Lot / Block Coverage
- ▶ Facade Zones
- ▶ Percent of Facade within Facade Zone



A Single Lot

Lot Size	4.59 acres
Lot Coverage	70%
Footprint	139,960 SF

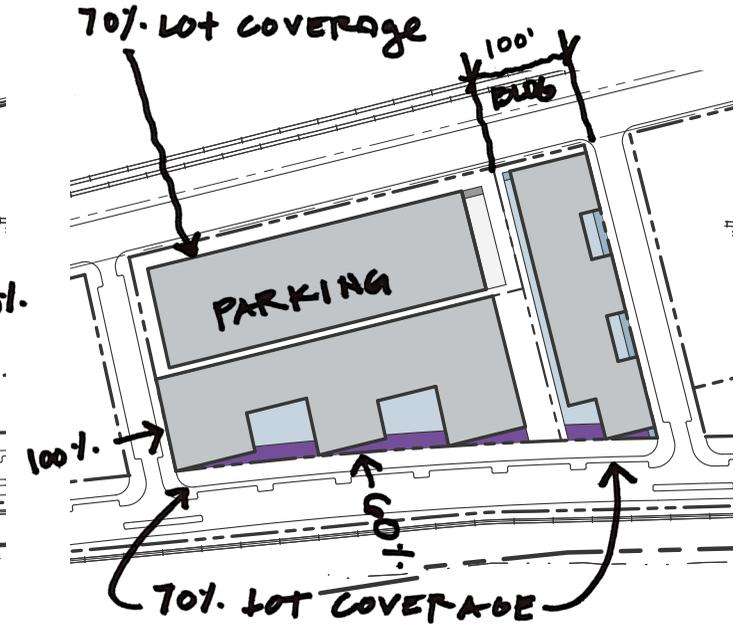
	Building	Parking Structure*
If 5 stories (min.)	249,700 GSF	2 levels
If 7 stories (max.)	349,580 GSF	2 1/2 levels



B Subdivision, River-Facing

	'E' Building	Corner Building	Parking Structure
Lot Size	1.18 acres	1.18 acres	2.23 acres
Lot Coverage	70%	70%	82%
Footprint	35,980 SF	35,980 SF	130 x 560'

	'E' Building	Corner Building	Parking Structure*
If 5 stories (min.)	179,900 GSF	179,900 GSF	3 levels
If 7 stories (max.)	251,860 sf	251,860 sf	4 levels



C Subdivision, End Grain

	Riverfront Building	Edge Building	Parking Structure
Lot Size	1.77 acres	1.04 acres	1.78 acres
Lot Coverage	70%	70%	82%
Footprint	53,970 SF	31,710 SF	130 x 415'

	Riverfront Building	Edge Building	Parking Structure*
If 5 stories (min.)	269,850 GSF	158,550 GSF	5 levels
If 7 stories (max.)	377,790 GSF	221,970 GSF	6 1/2 levels

*approximated at 300 sf/space

BUILDING PLACEMENT

LOCATING BUILDING FACADES BY ESTABLISHING SETBACKS AND FACADE ZONES

- ▣ CONNECTS BLOCKS TO RIVER
- ▣ ESTABLISHES SECOND AVENUE SERVICE AREAS

METRICS

BUILDING PLACEMENT

Building Setbacks From Property Line		
P	Primary Street (min. - max.)	0' - 10'
A	Second Avenue (min. - max.)	10' - 20'
B	Signature Boulevard (min. - max.)	0' - 10'
Secondary Street (min. - max.)		
S	Secondary Street (min. - max.)	0' - 10'
I	Interior	40'
R	Rear (adjacent to way / subdivision line)	0' / 6'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	25'
Facade Built within Facade Zone		
	Primary Street (min.)	80%
	Secondary Street (min.)	50%
	Civic Facade Zone	60-65%

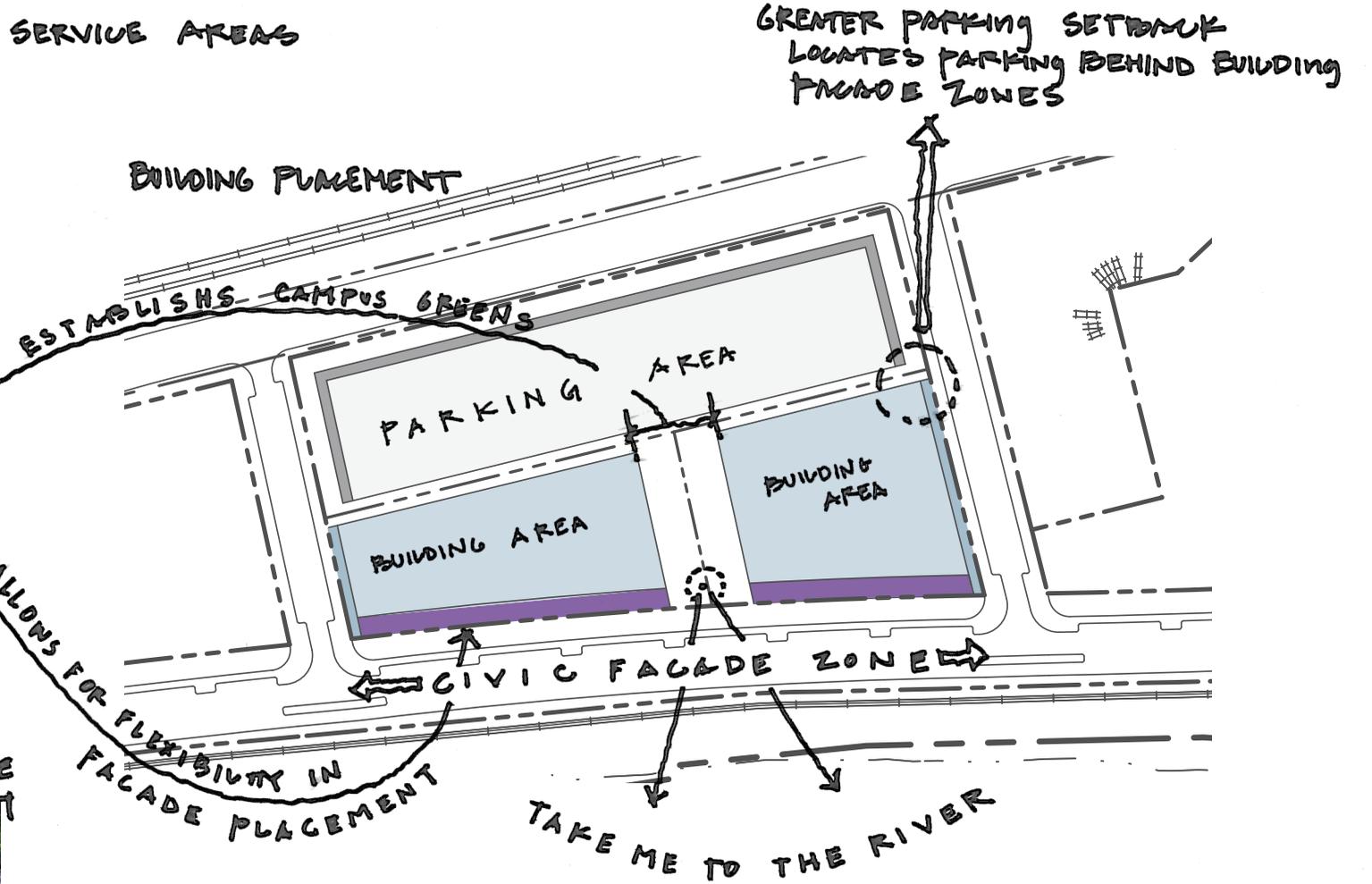
STEP ONE →

STEP TWO →

ALLOWS FOR CAMPUS GREENS REFERED TO IN OPEN SPACE



BUILDING PLACEMENT

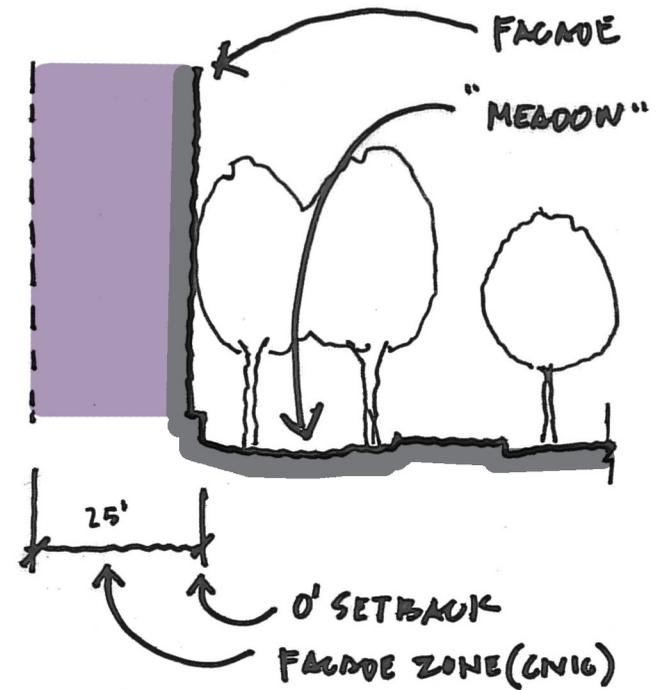


FACADE ZONES

FLEXIBILITY IN FACADE PLACEMENT



MORE SETBACK



LESS SETBACK

PARKING PLACEMENT

ESTABLISHING PARKING PLACEMENT AND ACCESS ALONG SECOND AVENUE

RESERVES BUILDING DEVELOPMENT ADDRESSES FOR RIVERFRONT CONNECTIONS

PARKING PLACEMENT & ACCESS

Parking Setbacks

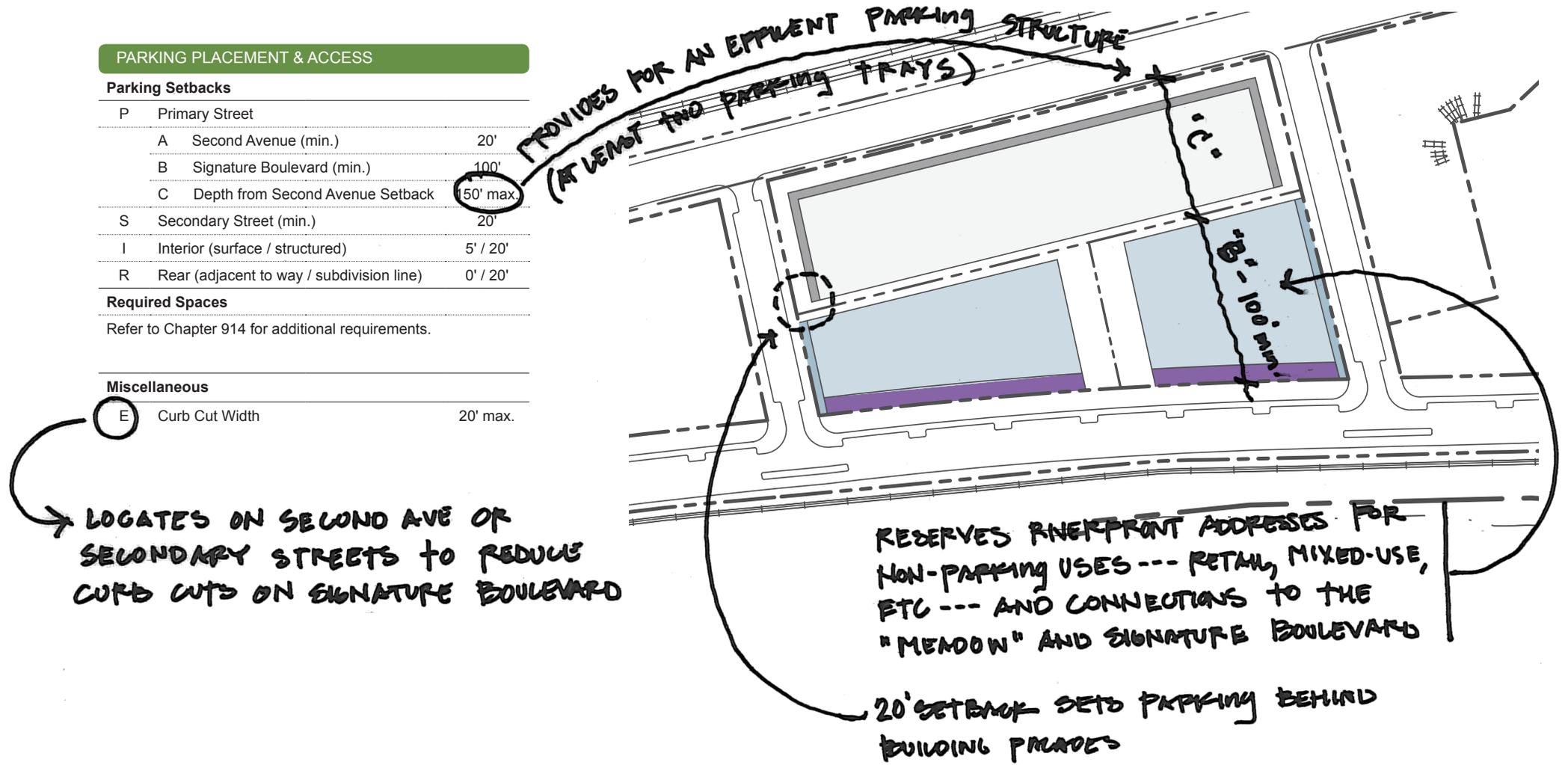
P	Primary Street	
A	Second Avenue (min.)	20'
B	Signature Boulevard (min.)	100'
C	Depth from Second Avenue Setback	50' max.
S	Secondary Street (min.)	20'
I	Interior (surface / structured)	5' / 20'
R	Rear (adjacent to way / subdivision line)	0' / 20'

Required Spaces

Refer to Chapter 914 for additional requirements.

Miscellaneous

E	Curb Cut Width	20' max.
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The following pages depict a sample of how to use the guidelines. These examples are intended to assist in the review process for and development of a building on a site, working within the framework of the guidelines. The numbers and dimensions shown are for demonstrative purposes only. Actual setbacks, heights, and other parameters are defined in each Sub-district section.

LOT COVERAGE

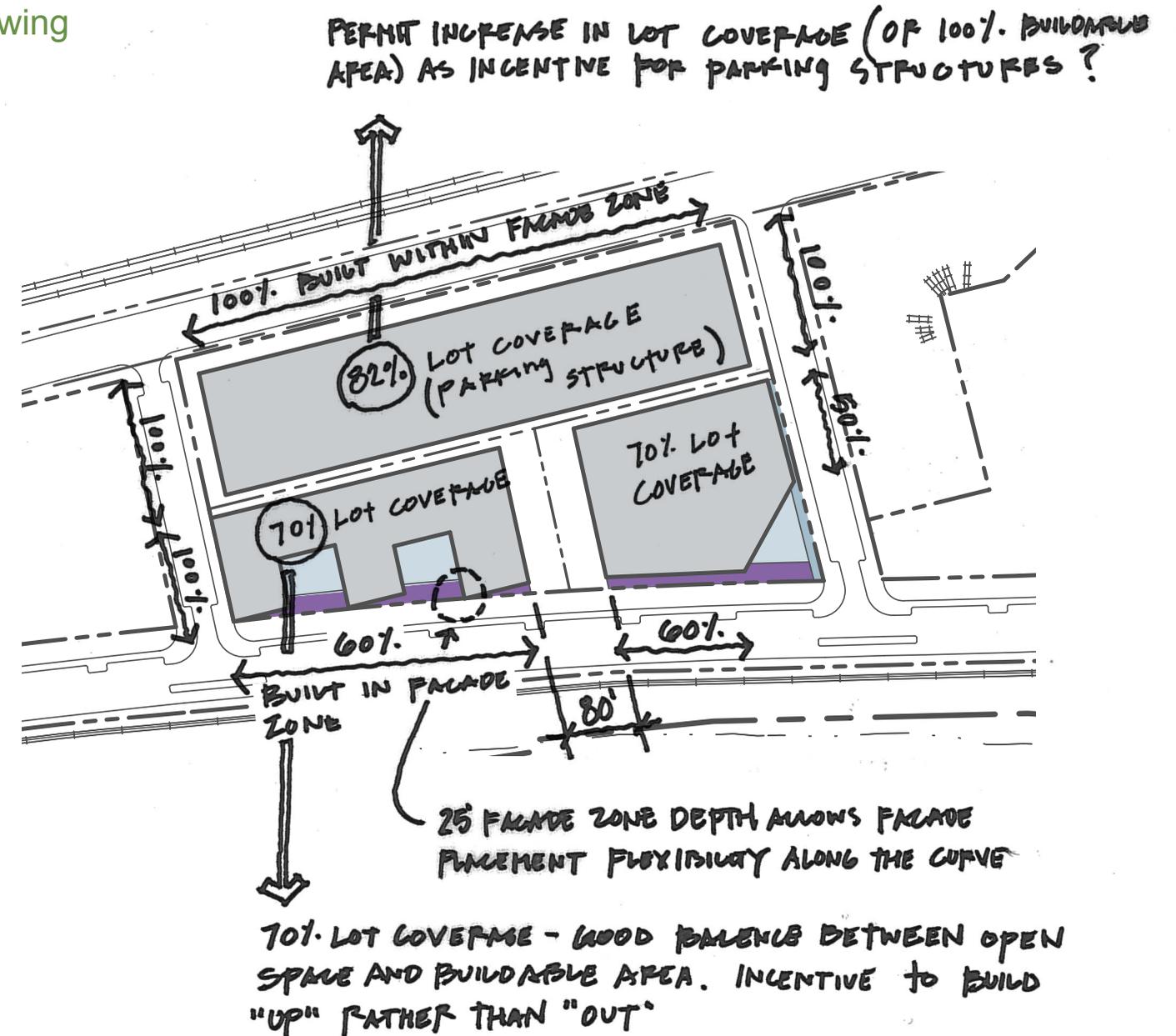
Encourage structured parking by allowing increases in lot coverage

BUILDING PLACEMENT

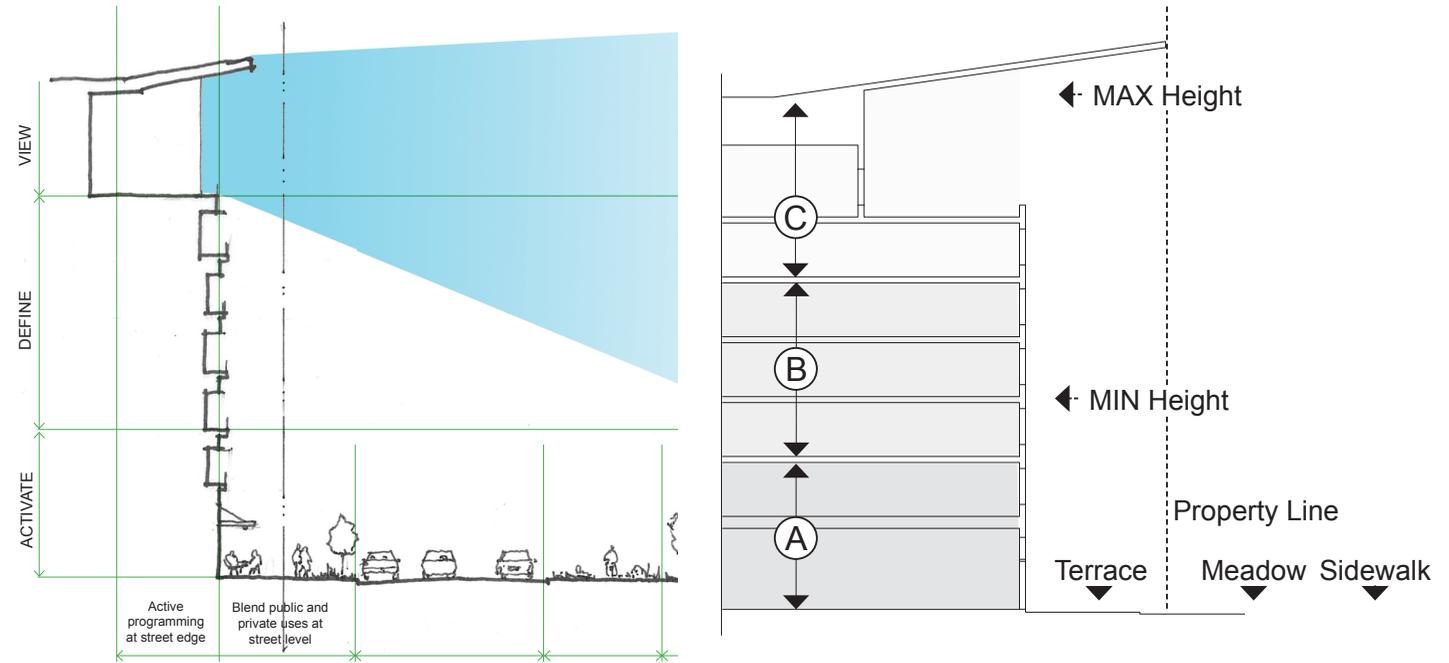
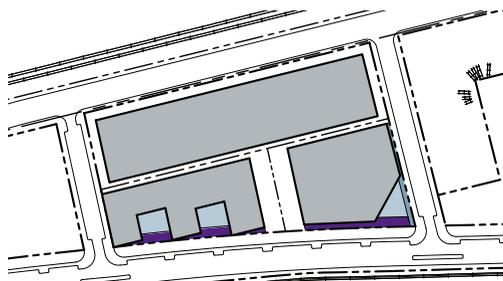
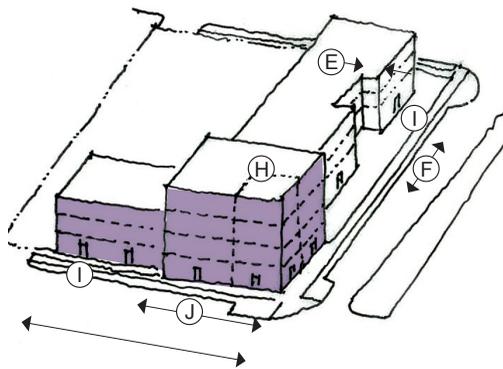
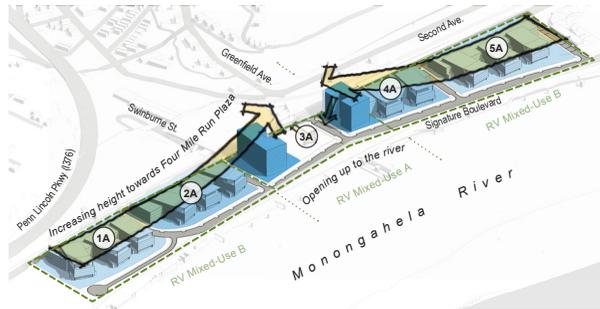
Building Setbacks From Property Line		
P	Primary Street (min. - max.)	0' - 10'
A	Second Avenue (min. - max.)	10' - 20'
B	Signature Boulevard (min. - max.)	0' - 10'
S	Secondary Street (min. - max.)	0' - 10'
I	Interior	40'
R	Rear (adjacent to way / subdivision line)	0' / 6'
Facade Zone Depth From Setback Line		
F	Facade Zone Depth	10'
C	Civic Facade Zone Depth	25'
Facade Built within Facade Zone		
	Primary Street (min.)	80%
	Secondary Street (min.)	50%
	Civic Facade Zone	60-65%

COVERAGE

#	Block		Coverage Block & Lot
	Acreage		
1A	4.3		65-75%
2A	3.7		70-80%
4A	3.0		70-80%
5A	2.3		65-75%



HEIGHT AND ARTICULATION



RV - Mixed Use B sub-district buildings are divided into three zones: the Ground Zone intended to activate the street with public and private programming; the Middle Zone intended to define the building facade edge; and the Upper Zone intended to provide views towards the riverfront

BUILDING HEIGHT & ARTICULATION

Building Height

Building Height (min.)	5 stories
Building Height (max.)	5-7 stories
Building Height (bonus)	1 additional story

Story Height

Ground Floor facing Meadow Elevation (min. - max.)	0" - 30"
A Ground Zone Height	1/4 height
B Middle Zone Height	1/2 height
C Upper Zone Height	1/4 height

Building Form

Street-Facing Wall Length w/o Offset (max.)	100'
Street-Facing Wall Offset Depth (min.)	4'
Street-Facing Wall Offset Length (min.)	10'

Transparency (Clear glass facades)

River and Campus Green Facing / Secondary Street (min.)	
Ground Zone	60% / 30%
Middle Zone	30% / 20%
Upper Zone	60% / 30%
Non-Residential, between 3 and 8 feet above grade	60% / 30%
Blank Wall Area, Primary (max) / Secondary Street (max)	35' / 45'

Pedestrian Access / Distance Between Entries

Entrance Facing Primary Street / Common Open Space	REQD.
Distance between Ground Floor Entrances along Primary Street (max)	75'

The following pages depict a sample of how to use the guidelines. These examples are intended to assist in the review process for and development of a building on a site, working within the framework of the guidelines. The numbers and dimensions shown are for demonstrative purposes only. Actual setbacks, heights, and other parameters are defined in each Sub-district section.

DEFINITIONS

Almono Building Development Definitions

Words and terms used in Section 2.3 Building Development Sites are defined in this section. Refer to the City of Pittsburgh Zoning Code, Chapter 926 for additional terms and definitions not listed here.

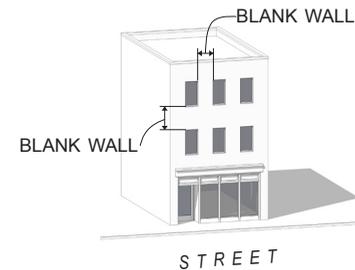
The general format consists of the definition followed by intent / commentary in *italics*.

Articulation

Substantial changes, greater than 12 inches in depth, in facade character as defined by the Zoning Administrator and may include windows, doors, columns, or other material changes.

Blank Wall

The portion of the exterior building FACADE that does not include windows, doors, columns, articulation or other apertures.



Buildable Area

The area of a DEVELOPMENT BLOCK or lot behind any required setback lines that buildings may occupy.

Development Block

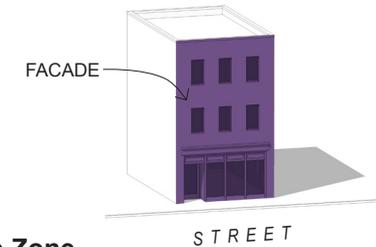
An area of land not transversed by subdivision lines that is bounded by Rights-of-Way or COMMON OPEN SPACE. *Development Blocks are intended to cluster regulations for larger developments and to define cohesive block character.*

Expression Line

An architectural feature such as a belt course, facade setback, material change, or fenestration change.

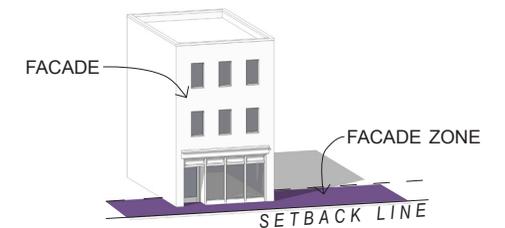
Facade

The vertical surface of a building that faces a street, open space, and/or the PUBLIC REALM.



Facade Zone

The area on a lot where a building FACADE must be located, as measured from the setback line. Facade zones are calculated by dividing the linear width of the building by the total width of the lot. *Facade Zones are intended to encourage building placement and form that supports an active PUBLIC REALM. Any portion of the FACADE ZONE on PRIMARY STREETS not defined by a building must be defined by landscape planting or plaza.*



Facade Zone, Civic

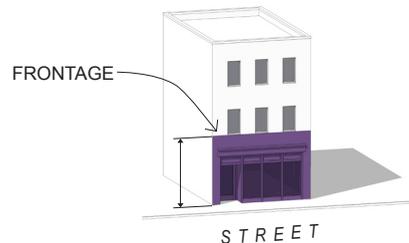
See FACADE ZONE. Civic Facade Zone standards shall be used in lieu of all other Facade Zone standards. *It is intended that building forms in Civic Facade Zones are focused on activating the PUBLIC REALM, and mixed uses are encouraged.*

Fenestration

The minimum percentage of windows and doors that must cover a FACADE, as measured from the top of finished floor of a story to the top of the finished floor above. Where there is no floor above, measurement is to the top of wall plate. In the case of the ground story, measurement is from the elevation of the sidewalk. Glass is considered transparent when it has a transparency higher than 80% and external reflectance of less than 15%.

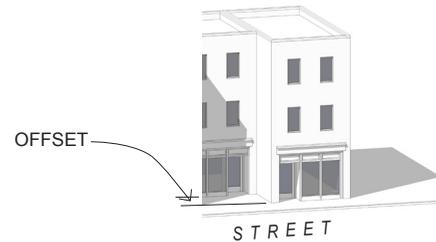
Frontage

The portion of the FACADE that contains components of a building that transition between the PUBLIC REALM and private realm. *Frontages are intended to encourage a vibrant streetscape where building form connects interior uses with exterior activity.*



Offset

Facade-depth ARTICULATION that provides relief from horizontal expanses.



Open Space, Parcel

See Chapter 926.9 on open space. Parcel open space is privately-owned and managed land that is intended for exclusive use by the parcel occupants. *Parcel open spaces are intended to be utilized for on-site stormwater management, view corridors, and active or passive recreation.*

Open Space, Common

See Chapter 926.9 on open space. Common open space is shared and publicly-used land that contributes towards the provisions of Urban Open Space as defined in the SP District zoning code requirements. *Almono common open space includes active and passive parks, plazas, and trails that contribute to the public realm.*

Public Realm

See Chapter 926.9. Publicly-owned rights-of-ways, public and civic buildings, and publicly-accessible open spaces, which have edges defined by buildings. *The Almono public realm is intended to provide street level pedestrian-based uses.*

Site Forces

The economic, social, and physical constraints that comprise a development's context. *Understanding and responding to site forces advance placemaking goals.*

Streets, Primary and Secondary

Hierarchical relationship between thoroughfares of sitewide importance according to the FACADE ZONES and FRONTAGES that face the PUBLIC REALM. *Distinct from rights-of-way or transportation networks, primary and secondary streets refer to the predominant orientation of building facades and frontages.*

Shared Parking

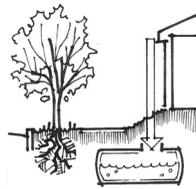
A parking space assigned to a development block or adjacent parcels that has distinct peak usage periods. *Shared parking encourages a "park once and visit multiple" strategy of sharing parking between adjacent parcels.*

Sub-district

A portion of one of the four Almono development districts that specifies building design parameters and use intent.

Zoning Lot

See Chapter 926.9.



SECTION 3.1

GREEN INFRASTRUCTURE

Integrated Stormwater Management	3.1 - 01
Initial Stormwater Plan	3.1 - 03
Expanded Stormwater Plan	3.1 - 05
Riverview	3.1 - 07
Smart Site Central Green	3.1 - 08
Eco-Tech Park	3.1 - 09
Hazelwood Flats	3.1 - 10
Green Infrastructure Tools	3.1 - 11
Materials	3.1 - 14

INTEGRATED STORMWATER MANAGEMENT

Goals and Approach

Because the City of Pittsburgh has combined storm and sanitary sewer infrastructure, it is vulnerable to overflow during periods of heavy precipitation. This overflow contains pollutants from untreated sewage as well as debris from impervious paved areas.

The Almono site aims to not only implement systems that have adequate capacity to retain and discharge water runoff, but also plans to utilize green and natural infrastructure to lessen the burden on the man-made infrastructure.

The goal of the Almono LP team is to respond to changing standards by providing flexibility to allow development that meets current standards while concurrently working to promote new systems with the evolving site design. The team will achieve this by working with City partners to manage regulatory and maintenance standards.

Current Standards

City of Pittsburgh Code requires that stormwater facilities control the peak stormwater discharges for the 2, 10, 25, and 100-year storm frequencies. The Almono on site management techniques and facilities

are sized to infiltrate, evapotranspire, and/or harvest for reuse a volume of 1.2 inches (95th percentile storm) of stormwater runoff.

GAI Consultants submitted the Stormwater Management Plan for Site Preparation for approval in November 2012, as amended.

Potential Standards

The national trend has been to steadily increase the amount of water a given site is responsible for managing. There is potential for the EPA to require parcels to manage the 98th percentile storm.



Green Street Right-of-way strategy



Naturalized Basin Open Space strategy



Rain Garden Parcel-based strategy

In addition to the EPA, the USGBC has incorporated the 98th percentile storm as a performance standard in LEED Pilot Credit 16*. The LEED Pilot Credits facilitate the introduction of new prerequisites and credits to LEED and this credit is intended to reduce runoff volume and improve water quality through replicating the natural hydrology and water balance of the site, based on historical conditions and undeveloped ecosystems in the region.

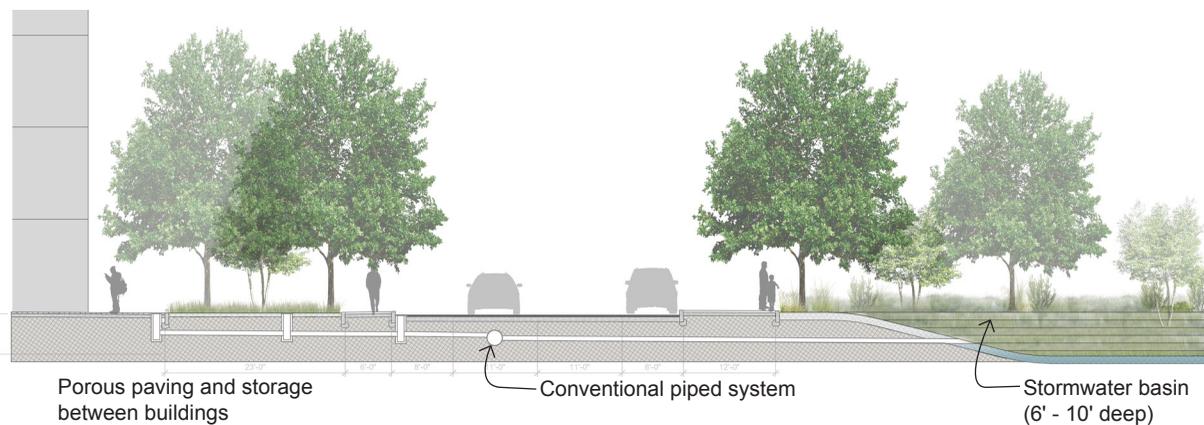
Option 2 of this credit targets the management of the 98th Percentile storm in a manner best replicating natural site hydrology processes using Low Impact Development (LID) and green infrastructure.

Almono Approach

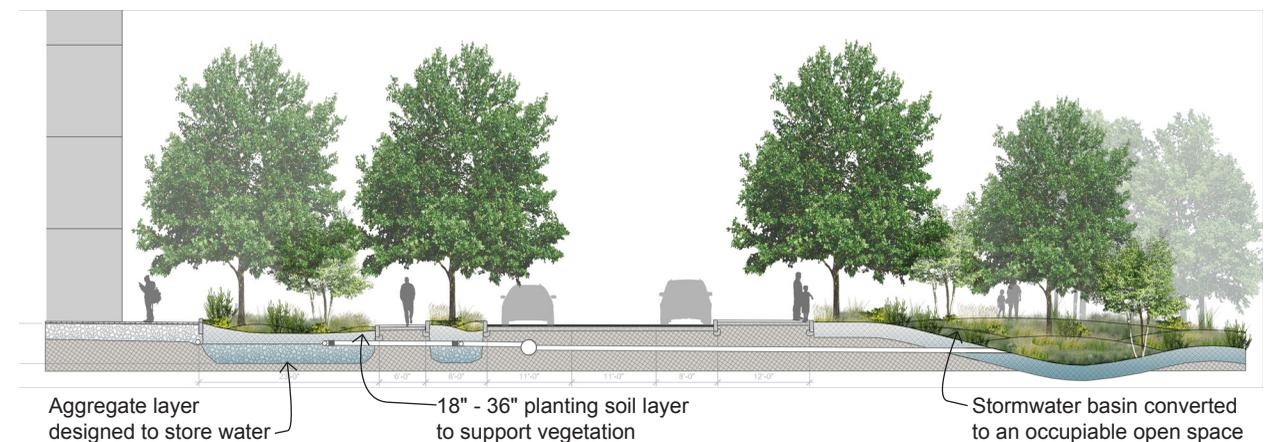
A decentralized approach to green infrastructure will develop a distributed network of green infrastructure components across the site that integrate with the placemaking goals of the public realm. The expanded stormwater plan incorporates the BMPs across the Rights-of-Way and parcels to unburden the open space from playing primarily a stormwater management role and incorporates areas of the site that would otherwise simply hide and pipe stormwater away.

The stormwater system occurs in two phases. The initial decentralized stormwater plan includes BMPs, such as rain gardens bioswales connected with an underdrain to the conventional grey water system. Initial BMPs will be focused on the common open space.

Initial Stormwater Management Plan



Expanded Stormwater Management Plan



NOTE: *<http://www.usgbc.org/ShowFile.aspx?DocumentID=8191>

INITIAL STORMWATER PLAN

Decentralized Approach

Existing Conditions

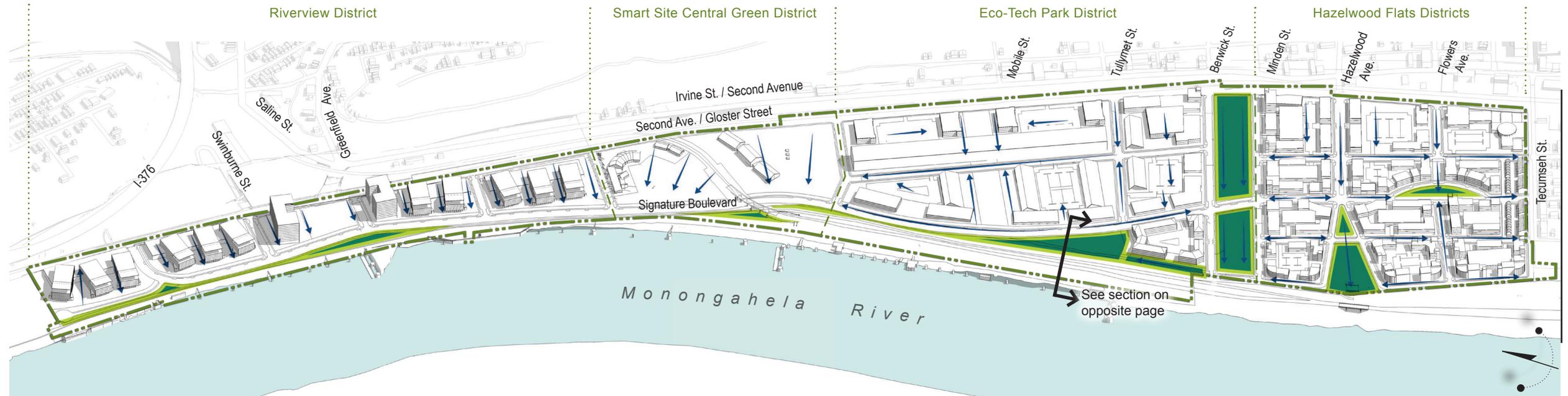
Currently, the site is occupied by large expanses of remnant building foundations and foundation slabs, roadways, and laydown areas. Fill brought onto the site has largely been placed on the building foundation slabs, in anticipation of the proposed grading and capping of the site under the Act 2 requirements.

The current stormwater management plan under review by the Department of City Planning includes a combination of green infrastructure and a conventional grey water system. As designed, the stormwater

Best Management Practices (BMPs) exceed the requirements to manage and treat the 95th percentile storm volume for all Rights-of-Way as shown in the Vision.

Stormwater BMPs are proposed for the common open spaces, to accept and retain and, where feasible under current environmental regulations, infiltrate a significant portion of stormwater runoff from the infrastructure and general site areas. The developer of each parcel will be responsible for managing the balance of stormwater runoff from their respective parcel.

Traditional stormwater infrastructure is designed to convey runoff from paved surfaces through sub-surface pipes to basins that hold water and release it in a controlled manner. With this approach the site would be graded to the appropriate elevation and planting soil would be added to the basin surfaces as needed to depths typically ranging from 4" to 6". The basins are designed to be large enough to capture the volume required by municipal code.



- Open Space Green Infrastructure
- Almono Site Property Line
- Surface Water Flow
- District Boundary

The areas highlighted as Open Space Green Infrastructure in the Initial Stormwater Plan Diagram that are under review by the Department of City Planning reflect this approach. Each basin is designed to be flat and open with a 4 to 1 side slope and have a storage depth that ranges from 1.5 to 2 feet (Stormwater Management Plan, Appendix D-1, Removal Capacity – Phase 1).

In certain locations, however, more than 2 feet (as illustrated in the conceptual section) is required in order to account for the outfall pipes that must enter the basin below the surrounding grade. The Eco-Tech Park Bio-retention Cell 1 (ETP-BC-1), for example is approximately 10 feet deep at its perimeter, which itself is 6 feet below the roadway. This would compromise the ability of these BMPs to allow for recreational uses.



EXPANDED STORMWATER PLAN

Expanded Approach

A Green Infrastructure approach views stormwater as a resource to be captured, cleansed, and utilized to create a diverse and vibrant landscape. Additional aspirations include reaching net zero water for irrigation by harvesting rain water, avoiding the use of potable water for irrigation.

As the development of the Almono site evolves and new standards and aspirations emerge, stormwater management will be considered. Each land type will incorporate varied green infrastructure elements that result in a verdant landscape that is replenished rather than burdened by precipitation events.

Rights-of-Way

The Rights-of-Way will become integral features of Almono's green infrastructure. These Green Streets are primarily composed of a series of landscape swales or planters that manage stormwater at the source. They provide water quality benefits and renew groundwater supply, creating attractive streetscapes that enhance the pedestrian environment and giving the neighborhood character.

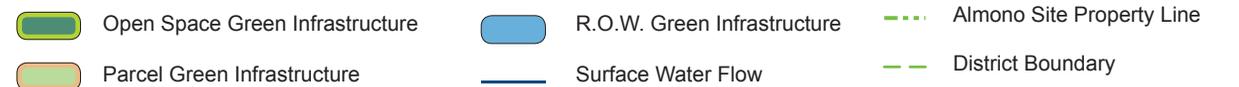
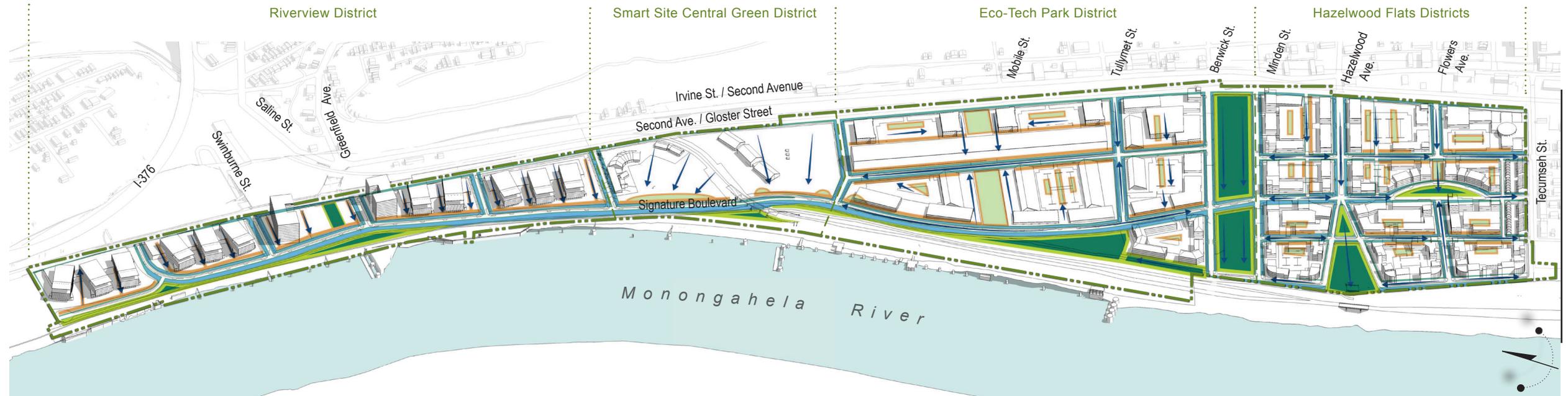
Open Space

With a decentralized green infrastructure system, open spaces serve multi-functional aesthetic and ecological

purposes. The open spaces of Almono will be integrated into the stormwater management system in a manner that provides opportunities for education, interaction, and a wide variety of landscape experiences.

Building Development Sites

A decentralized approach guides parcel owners in the creation of their own green infrastructure to contribute to this larger system. This approach improves water quality and enhances the Almono experience, which will allow the owner to become an active participant in sustainable development.



Vegetation

A network of tree trenches, vegetated swales, rain gardens, and porous paving with sub-surface storage aggregate beds, receives, conveys, treats, and detains runoff by capturing stormwater where it is generated before it enters the basins located in the open spaces.

Soil and Aggregate

Site grading during the initial phase will anticipate and consider the realization of the expanded approach and provide the subbase to sustain the ecology and vegetation. The layer of aggregate stores water in the

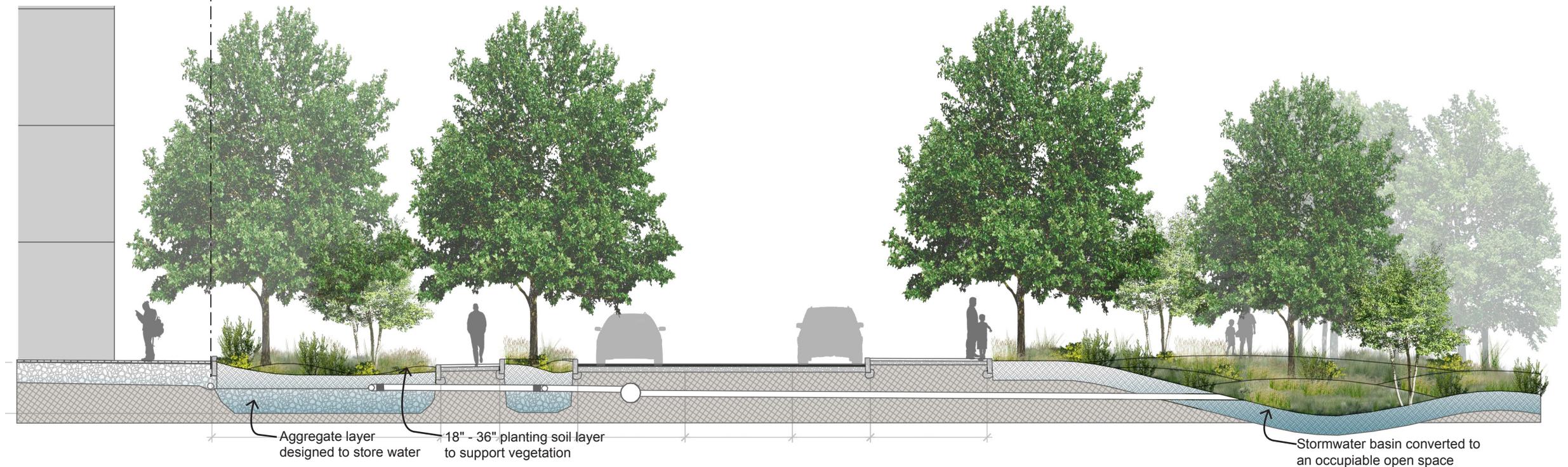
pore space between the stones. Roughly 40% of the volume occupied by this aggregate layer stores water.

An 18" to 36" thick layer of planting soil is needed to ensure the proper establishment of the plant material root systems promoting the long term success and performance of the landscape.

This fine-grained, landscape-integrated, green infrastructure network will unburden the Bioretention Cell basins from containing as much water as previously required.

Open Space

As illustrated in the conceptual section, the areas highlighted as Open Space Green Infrastructure in the Expanded Stormwater Plan Diagram will have varied topography and multi-layered vegetation, creating the opportunity for interactive trails and passive recreation and allowing for a diverse habitat and the establishment of a resilient native plant community.



RIVERVIEW

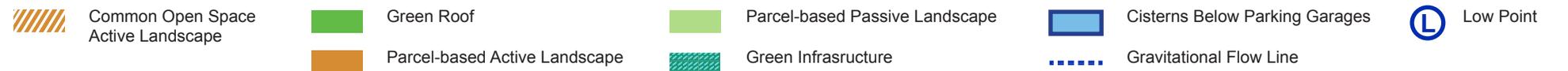
Green Infrastructure

The following pages diagram the intent for an integrated stormwater management system within each development district.

Intent

An integrated approach to green infrastructure in Riverview will allow the limited amount of common open space to play a greater role recreationally and to be less burdened by the need to manage stormwater. The building integrated parcel-based infrastructure can consist of the following elements:

- ▶ Green Roofs
- ▶ Sub-surface cisterns below parking garages
- ▶ Vegetated Swales
- ▶ Bioretention
- ▶ Porous Pavement
- ▶ Green Streets
- ▶ Tree Trenches



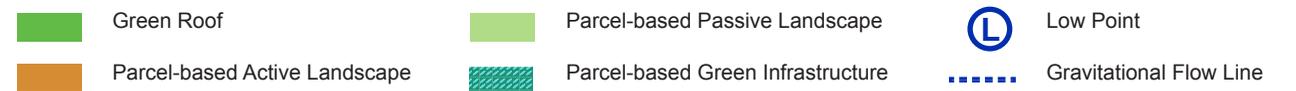
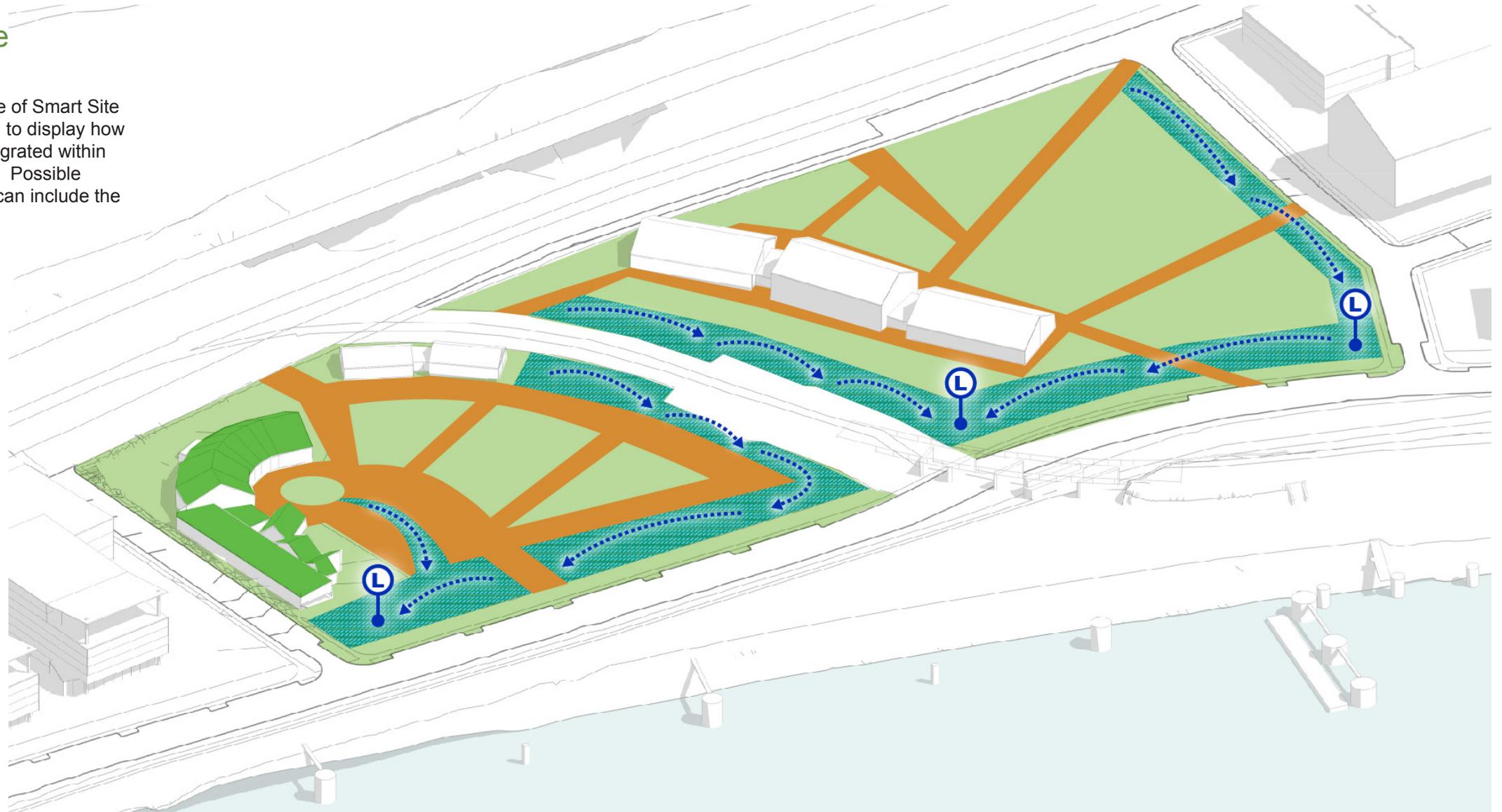
SMART SITE CENTRAL GREEN

Green Infrastructure

Intent

The parcel-based infrastructure of Smart Site Central Green has the potential to display how green infrastructure can be integrated within passive and active landscapes. Possible green infrastructure strategies can include the following elements:

- ▶ Green Roofs
- ▶ Vegetated Swales
- ▶ Bioretention
- ▶ Porous Pavement
- ▶ Green Streets
- ▶ Tree Trenches



ECO-TECH PARK

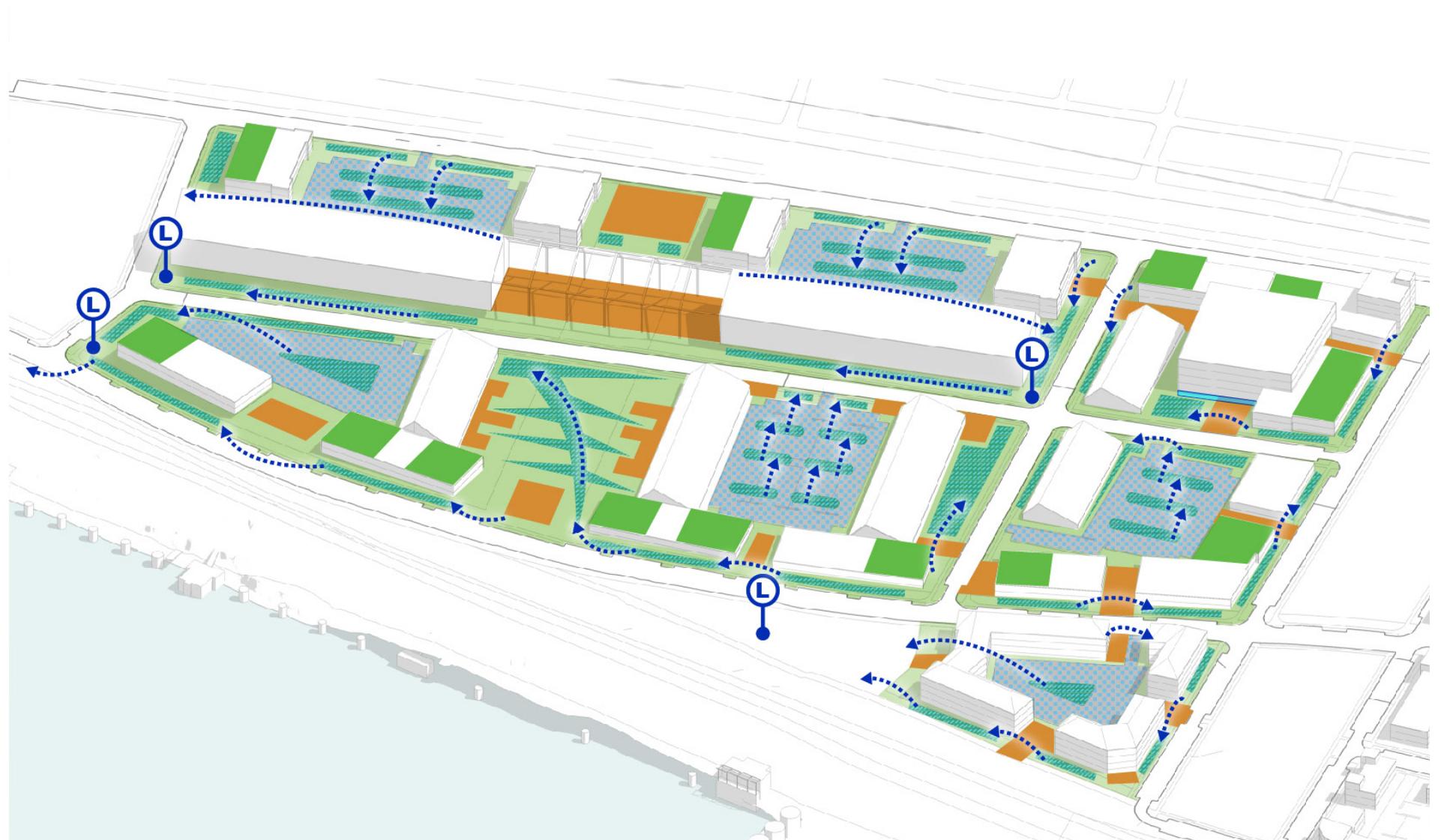
Green Infrastructure

Intent

One of the largest spatial components of Eco-Tech Park may be surface parking. An opportunity exists to transform these lots into sub-surface storage for stormwater. Every lot requires an aggregate base, which will be designed to allow the pore space between the aggregate (roughly 40% of the total volume) to hold water. Vegetated swales can also be installed to treat contaminants within stormwater runoff. When combined with potential green roofs and additional parcel-based bioretention, Eco-Tech park can become a model for a more sustainable light industrial development.

Potential design elements include:

- ▶ Green Roofs
- ▶ Sub-surface cisterns below parking garages
- ▶ Vegetated Swales
- ▶ Bioretention
- ▶ Porous Pavement
- ▶ Green Streets
- ▶ Tree Trenches



 Green Roof	 Parcel-based Passive Landscape	 Cisterns Below Parking Garages	 Low Point
 Parcel-based Active Landscape	 Parcel-based Green Infrastructure	 Porous Parking Lots with Stormwater Storage in Aggregate Base	 Gravitational Flow Line

HAZELWOOD FLATS

Green Infrastructure

Intent

Of all the districts, the parcels in Hazelwood Flats have the least amount of associated open space. In order to prevent this open space from having to function entirely as stormwater management, an integrated approach is necessary. Every Green Infrastructure element found in the other Almono districts are recommended for implementation within Hazelwood flats. These elements include:

- ▶ Green Roofs
- ▶ Sub-surface cisterns below parking garages
- ▶ Vegetated Swales
- ▶ Bioretention
- ▶ Porous Pavement
- ▶ Porous Parking Lots with Stormwater Storage in Aggregate Base
- ▶ Green Streets
- ▶ Tree Trenches



 Green Roof	 Parcel-based Passive Landscape	 Cisterns Below Parking Garages	 Low Point
 Parcel-based Active Landscape	 Parcel-based Green Infrastructure	 Porous Parking Lots with Stormwater Storage in Aggregate Base	 Gravitational Flow Line

GREEN INFRASTRUCTURE TOOLS

Rights-of-Way

Different tools and strategies can be implemented for each of the land types, **Rights-of-Way, Open Space, and Building Development Sites**. The Almono LP team determined methods for integrated green infrastructure systems to be incorporated into each district. The list of tools provided for each land type is not intended to be exclusive. Additional strategies will be reviewed through the FLDP process.

Planting Strips use vegetation to manage stormwater at its source, reducing flows, improving its quality, and enhancing watershed health. Runoff from the roadway is directed to a planter where the water flow is slowed, cleansed, and infiltrated. Once the planters and the soils reach their storage capacity the water flows to the street and continues to the next trench or drain inlet.

Continuous Tree Trenches are long, linear planting beds along sidewalks or streets. Trenches allow individual trees to share soil, water, and nutrients, and increase the area below grade for root growth. Recharge beds placed under the trenches to a depth of 18" or more allow water to be stored within the trench without drowning the trees. An overflow connection links to the grey water system in the event that the recharge bed fills with water.

Pervious Pavement surfaces are typically asphalt, concrete, pavers, reinforced turf, or rubber play surface overlaid on a subsurface, open graded stone storage, or infiltration bed. Stormwater drains through the surface, is held in the voids of the subsurface, and then slowly infiltrates into the uncompacted soils below. Stormwater runoff from other portions of the site can be conveyed into the stormwater bed for management.

Pervious pavement is suitable for parking lots, plazas, playgrounds, pathways, and other hardscape areas. Pervious pavement can be used on low-volume streets if conditions are suitable for maintenance and sediment control. If infiltration is limited, the subsurface can include a slow-release underdrain system.

Infiltration / Storage Beds** capture runoff in a media bed located beneath an impervious surface or an engineered layer of soil and vegetation. Infiltration beds store runoff until it infiltrates into the subsurface below. Storage media includes clean-washed, open-graded stone aggregate, proprietary stormwater products, or perforated pipes set in a stone bed. Infiltration beds are suited for level areas such as athletic fields, plazas, and areas not suitable for pervious pavement.



Precedent, Planting Strips



Precedent, Continuous tree trench



Precedent, Pervious Pavement



Precedent, Infiltration/Storage Beds

Open Space

Naturalized Basins are flat-bottomed, vegetated, and shallow basins that collect and filter runoff, allowing pollutants to settle out as water infiltrates or is retained in planting soils. A naturalized infiltration basin is designed to retain the SOV or required stormwater volume with no surface discharge. The basin and outlet structure are also designed to provide peak flow rate control. A naturalized detention basin can provide peak rate mitigation while also reducing runoff volume, improving water quality, and providing temperature mitigation. Habitat creation and reduced maintenance may be additional benefits.

Infiltration Berms are compacted linear mounds of earth constructed along contours that are used to reduce stormwater velocities and detain runoff volume

on hillsides with gentle to moderate slopes. By creating gentle variations in the topography, infiltration berms slow the flow of runoff to allow ponding on the soil surface and storage of runoff in modified soils or in a stone trench, and promote infiltration behind the berm. Infiltration berms can stabilize slopes, prevent erosion, add interest to uniform landscapes, filter pollutants in runoff, and create habitat.

Vegetated Swales** are shallow, landscaped channels with trapezoidal or parabolic geometry and a slight longitudinal slope, used to convey and treat stormwater runoff. Densely planted with grasses, shrubs, and often trees, vegetated swales improve water quality and reduce flow rates. Depending on design, vegetated swales can also reduce volume.

Bioretention** areas are vegetated, shallow surface depressions that use the interaction of plants, soil, and microorganisms to store, treat, and reduce runoff volume, and to reduce the flow rate of stormwater runoff. Bioretention areas designed for infiltration can also be referred to as bioinfiltration areas. Those that cannot infiltrate discharge via an underdrain. A combination of these two strategies is often used.

Bioretention provides stormwater management by capturing runoff in the shallow surface depression. A bioretention area may include a stone storage bed beneath the soils. Water drains through the bioretention soils during small, frequent rainfall events. Bioretention systems always include a positive drainage overflow structure to safely convey large rainfall events from the bioretention area.



Naturalized Basin



Infiltration Berm



Vegetated Swale

Building Development Sites

Runoff Capture, Re-use, and Volume Reduction

Rainwater can be used as a resource when it is captured from rooftops and other impervious surfaces, stored in rain barrels or cisterns, and reused as non-potable water. These reservoirs can also detain the peak flow of the “design storm” and release it slowly over time. Cisterns can be placed either above or underground.

Captured rainwater can be used for landscape irrigation, fire needs, toilet flushing, or other greywater uses. Roof runoff is generally cleaner and more suitable than runoff from parking lots and roads, which require additional treatment and maintenance to address sediment. Runoff capture and reuse also reduces the volume and peak flows associated with stormwater runoff.

Given the building typologies in Almono, a combination of surface and subsurface cisterns is recommended.

Green RoofS consist of vegetated roof cover used to mimic the hydrologic performance of surface vegetation rather than the impervious surface cover of a flat or pitched roof. Green roofs reduce the volume of runoff from a roof as well as the rate at which runoff leaves a rooftop. Green roofs help to minimize thermal impacts to downstream receiving waters. Green roofs may be designed to accommodate functions ranging from simple rainfall management to more complex systems that integrate rainfall management with livable/usable space.

Rain Gardens are small bioretention areas that utilize vegetation, and shallow surface depressions that optimize the interaction of plants, soil, and microorganisms to store, treat, and reduce runoff volume, and to reduce the flow rate of stormwater runoff. These gardens may be designed to infiltrate the water, or may drain the retained runoff through the use of an underdrain.

Underground Stormwater Storage provides minimal stormwater quality benefits but can be a successful addition to a development's stormwater management plan when coupled with other stormwater BMPs. Pre-treatment at the system's inlet can improve the water's quality and is necessary if the stored water is allowed to infiltrate the soil.



Cisterns that capture and store rainwater



Green roofs reduce the volume and rate of runoff



Underground stormwater management

GREEN INFRASTRUCTURE MATERIALS

Performance + Sustainability + Aesthetics

Pave Less Reducing pavement can help decrease stormwater runoff volume and velocity and improve water quality, infiltration and recharge.

Recycled Material can be used for components of concrete, asphalt, or subbase. Use of Recycled Concrete Aggregate (RCA) is advantageous in areas where sources of waste concrete are plentiful.

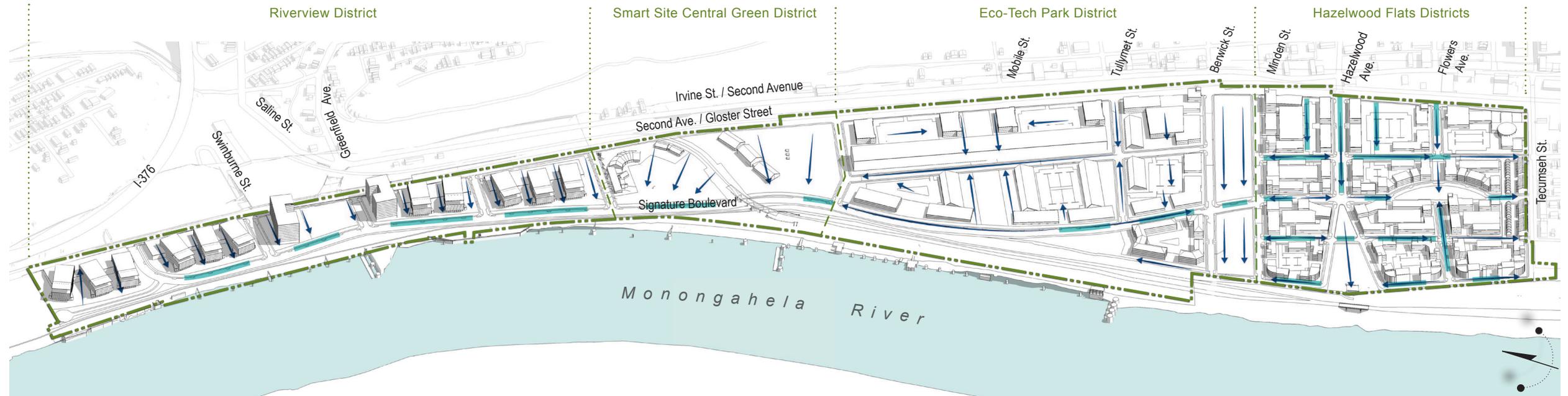
Recycled materials can be incorporated into mix designs for asphalt to reduce the use of virgin petroleum, sand, and stone aggregates. Reclaimed

asphalt pavement (RAP) is the most commonly used recycled component in asphalt pavements and is suitable for coarse or fine aggregates for subbase layers, or can be used for the top coat of asphalt. Air Cooled Blast Furnace Slag (ACBFS) is a by-product of iron manufacturing that is crushed and screened and can then be used as a subbase material.

Use Porous Paving such as stabilized gravel, porous concrete, porous asphalt, porous aggregate unit pavers, unit pavers, and decks in hardscape areas suitable for infiltration. Take advantage of proposed grades and slopes.

Minimize Urban Heat Island Effect Dark pavement has a lower albedo so it will absorb solar energy and likely convert it into stored heat. Light pavement reflects solar energy and has less potential to absorb light and store heat. Decrease the heat absorption of pavement by reducing its area, shading it with vegetation, or placing it in shaded areas.

Re-Purposed Materials Where appropriate, demolished materials can be re-used in the design of open space amenities. As a former industrial site, Almono has the opportunity to embrace its past and incorporate that aesthetic into elements of its design.



NOTE: Pervious Pavement is located on slopes of approximately 2% or less



SECTION 3.2

LANDSCAPE STANDARDS

Communities

3.2 - 01

Character

3.2 - 05

LANDSCAPE COMMUNITIES

Representative Species

This plant list provides representative species from the native plant communities Almono has the potential to reference through its landscape design. This list is not exhaustive, but is rather intended to serve as a framework for considering potential plantings. Additional considerations when developing a planting design include pH range, soil, drought tolerance, moisture use, salt tolerance, shade tolerance, and availability.

Encouraging Genetic Diversity

The native plant communities outlined in this report provide the basis for a landscape that is well-adapted to this region. Additionally, planting designs should also consider methods to enhance the genetic diversity of the plants used. Planting communities with diverse genetic profiles are less vulnerable to blights, and are more robust.

A broad cross-spectrum of plant heritage can be achieved by these methods:

- ▶ Avoid mass-cloned species.
- ▶ Work with local nurseries and growers who are knowledgeable about plants in the area.
- ▶ Consider contract growing to assure that native species are present in the quantities necessary at the right time.

	Common Name	Scientific Name	Street Tree	Lower Moisture						Higher Moisture	
				Dry Hard-wood Forest	Mesic Hard-wood Forest	Mesophytic Forest	Terrestrial Forest	Bottomland Forest	Wet Meadow	Floodplain Forest	
CANOPY TREES											
	Yellow Buckeye	A. flava				•					
	Box-Elder	Acer negundo									
	Red Maple	Acer rubrum	•	•	•		•	•		•	
	Sugar Maple	Acer saccharum		•		•					
	Silver Maple	Acer saccharinum								•	
	Ohio Buckeye	Aesculus glabra				•					
	Yellow Birch	Betula alleghaniensis			•						
	Sweet Birch	Betula lenta		•	•		•				
	Shellbark Hickory	Carya cordiformis		•			•				
	Pignut Hickory	Carya glabra		•			•				
	Shagbark Hickory	Carya Ovata			•	•	•				
	Mockernut Hickory	Carya tomentosa			•		•				
	Hackberry	Celtis occidentalis		•							
	American Beech	Fagus grandifolia			•	•					
	Ginkgo	Ginkgo biloba	•								
	Honeylocust	Gleditsia triacanthos	•								
	Kentucky Coffee Tree	Gymnocladus dioica	•								
	Tulip Tree	Liriodendron tulipifera	•		•	•	•				
	Cucumber Tree	Magnolia acuminata				•					
	Blackgum	Nyssa sylvatica	•					•			
	Hop-hornbeam	Ostrya virginiana	•	•	•						
	Bloodgood London Planetree	Platanus x acerfolia	•								
	Wild Black Cherry	Prunus serotina				•	•				
	White Oak	Quercus alba		•	•		•				
	Swamp White Oak	Quercus bicolor	•				•	•			
	Bur Oak	Quercus macrocarpa	•				•				
	Chestnut Oak	Quercus montana		•			•				
	Pin Oak	Quercus palustris	•				•	•			
	Northern Red Oak	Quercus rubra	•	•	•	•	•				
	Black Oak	Quercus velutina		•	•		•			•	
	Black Willow	Salix nigra									
	Bald Cypress	Taxodium distichum	•								
	Basswood	Tilia americana		•		•					
	Elm (disease resistant)	Ulmus Hybrids	•					•		•	

Reintroducing Native Plant Communities

The indigenous soil and vegetation of the Almono site has long been removed and modified. Its former industrial use and brownfield status presents a unique opportunity for plant selection and landscape design. Because certain plant communities have evolved over time in this region, Almono can become a testing ground for the reintroduction of native plant communities to former brownfield sites. The intent is not to replicate these communities in their entirety, but instead to design the conditions which will allow appropriate representative species from these communities to thrive.

Soil Moisture Gradient

The soils will perform an integral role in ensuring the success of the native species selected for the site. The vegetation will respond to these soils as well as to the anticipated moisture levels at specific site elevations. The higher elevations closer to Second Ave will be inherently drier, while those closer to the river will have higher moisture content. Selecting species that are better suited to the anticipated moisture regime will increase their rate of success.

Rights-of-Way Green Connections

Plant communities can be used to enhance the character of the Rights of Way. They can provide a unique yet complimentary aesthetic to the surrounding parcels. The resulting vegetation will help to connect the different development zones. Together these zones and the Rights-of-Way will evolve over time resulting in a matrix of vegetation that is both appropriate to the regional ecology and unique to Almono.



--- Almono Site Property Line

— District Boundary

LANDSCAPE COMMUNITIES

Reference Communities

Dry Oak Mixed Hardwood forests occur on less acidic to somewhat calcareous, moderately dry soils. It is most often found on south and southwest-facing slopes.

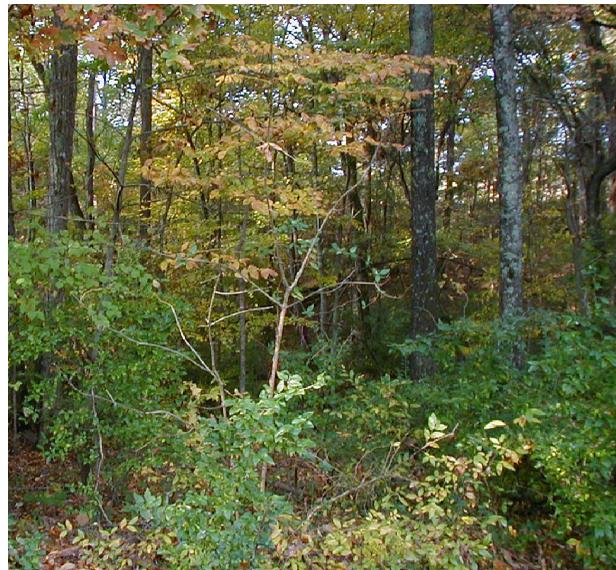
The higher elevations of Eco-Tech Park and Hazelwood Flats will have less runoff and dryer soils, which are appropriate conditions for vegetation adapted to a **Dry Hardwood Forest**.

Mesic Hardwood Forests are predominant among many of Pennsylvania's hardwood forests. This community occurs on fairly mesic sites, which have moderate well-balanced supplies of moisture, and is quite variable in composition.

The middle elevations of Hazelwood Flats will have variable runoff and mesic soils and are appropriate conditions for a **Mesic Hardwood Forest**.

Mixed Mesophytic Forests have plants and trees that generally require a more or less continuous water supply, and are specific to the southwestern part of Pennsylvania. These forests includes several species that find their northern and eastern limits in Pennsylvania. This extremely rich community type typically occurs on deep soils at a lower slope position.

The lower elevations of Eco-Tech Park and Hazelwood Flats will receive water from the higher elevations, supporting vegetation from a **Mesophytic Forest**.



Landscape Community: Dry Hardwood Forest



Landscape Community: Mesic Hardwood Forest



Landscape Community: Mesophytic Forest

LANDSCAPE COMMUNITIES

Red Maple Forests are generally an early- to mid-successional type becoming increasingly common as red maple increases in Pennsylvania's forests. *Acer rubrum* (red maple) has a wide ecological amplitude and so this type may occur from the upper through lower slope. The associated species vary greatly.

There will be a range of elevational conditions in the Riverview District resulting in a more variable supply of moisture. The **Terrestrial Forest** can thrive in a variety of conditions and will be suited for the terrain in this district.

Bottomland Oak - Hardwood Palustrine Forests are characterized by the dominance or near dominance of *Quercus palustris* (pin oak) and/or *Quercus bicolor* (swamp white oak).

The lower elevations of Almono will have a more consistent supply of water, making them suited to the species found in a **Bottomland Forest**.

Mixed Forb - Graminoid Wet Meadows are open, commonly occurring plant communities dominated by herbaceous vegetation. They are typically saturated or inundated early in the growing season, but may be dry by mid- to late summer. Although flooded or saturated soils may help to keep these systems open, most are also grazed or mowed.

The wettest areas of Almono are **Wet Meadows**. They can survive inundation during the rainy season as well as a lack of moisture during the dryer months.

Silver Maple Floodplain Forests are common on low terraces and levees of the floodplain and islands of large tributaries of the major drainages of Pennsylvania.

The floodplain zone of Almono has the greatest opportunity to match the species composition and ecology of a **Floodplain Forest**. With proper management, portions of this have the potential to be successfully restored, creating a natural resource for the community and local wildlife.



Landscape Community: Terrestrial Forest



Landscape Community: Bottomland Forest



Landscape Community: Wet Meadow



Landscape Community: Floodplain Forest

LANDSCAPE CHARACTER

Different Districts, Different Character

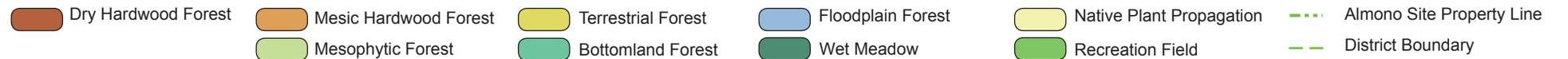
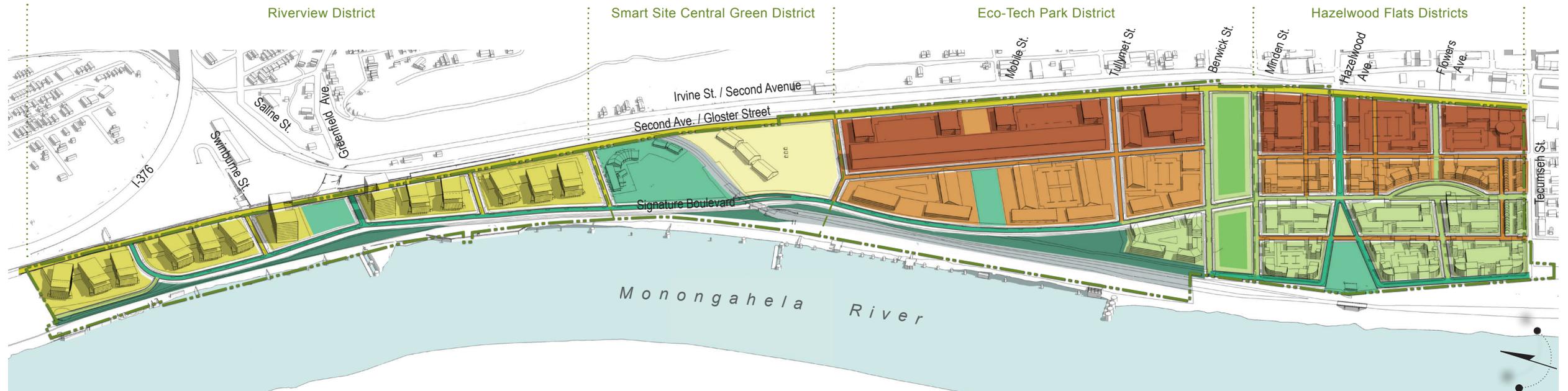
The four districts of Almono have varied topographies, soils, microclimates, and more. These conditions along with the intended uses of the **Rights-of-Way, Open Spaces, and Building Development Sites** affect which plants are appropriate choices to plant. The following paragraphs describe the characteristics intended for each of the districts.

Riverview will feature:

- ▶ Formal allee planting along the Rights-of-Way
- ▶ Low herbaceous planting and canopy trees in roadside swales
- ▶ Canopy tree groves over turf and meadows in open spaces
- ▶ Floodplain forest restoration along river edge trail
- ▶ Green roof plantings over buildings
- ▶ Rain gardens and vegetated swales with understory trees and low plantings in building courtyards

Smart Site Central Green will feature:

- ▶ Informal allee planting along Rights-of-Way
- ▶ Low herbaceous planting, understory, and canopy trees in road side swales
- ▶ Canopy tree groves over turf and meadows in amphitheater
- ▶ Canopy trees and constructed demonstration wetland plantings at Roundhouse Green
- ▶ Tree nursery with low herbaceous edge planting



Eco-Tech Park will feature:

- ▶ Large multi-layer hedgerows of canopy trees, understory trees, and shrubs along Signature Boulevard
- ▶ Canopy tree groves over turf and meadows in open space
- ▶ Rain gardens and vegetated swales with understory trees and low plantings at building entrances
- ▶ Low herbaceous planting and canopy trees in parking lot swales
- ▶ Wet meadow plantings surrounding upland meadow

Eco-Tech Park (continued)

- ▶ knolls in Eco-Tech Pond
- ▶ Canopy tree groves over turf and meadows surrounding wet meadow plantings in Eco-Tech Run

Hazelwood Flats will feature:

- ▶ Large canopy trees in tree trenches and bulb out rain gardens along boulevard and avenues
- ▶ Small canopy trees in tree trenches and linear bioswales
- ▶ Low herbaceous planting and canopy trees in parking lot swales

Hazelwood Flats (continued)

- ▶ Canopy tree groves over turf and meadows in open space
- ▶ Canopy tree groves over recreational park edge swales and infiltration berms
- ▶ Bottomland Forest over active turf and meadow transitioning to Floodplain Forest at Hazelwood Run



Riverview Characteristic: Swale with shrubs and tree canopy



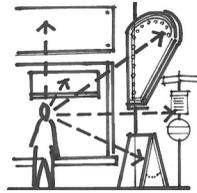
Eco-Tech Park Characteristic: Rain Garden at building entry



Smart Site Central Green Characteristic: Tree nursery



Hazelwood Flats Characteristic: Tree Trenches



SECTION 3.3 SIGNAGE

Placemaking Goals
Signage Application
Signage Types

3.3 - 01
3.3 - 02
3.3 - 03

PLACEMAKING GOALS

Signage Placemaking Principles

An effective signage system provides information and direction for users in finding their way around a city, neighborhood, or mixed-use street. When approached in a comprehensive placemaking process, signage may also encourage historical and cultural education, establish an Almono place-specific identity, and provide a sense of place. The following placemaking principles are defined:

Wayfinding is promoted through multiple scales of signage that consider how users arrive and interact within Almono. Whether arriving via automobile, transit, bicycle, or on foot, the scale of site wayfinding should reflect arrival and on-site circulation.

Public Art enriches the public realm through integration on all signage types and scales. It creates intensity, interest, and pride in celebrating the unique character of Almono.

Multiple Scales of signage provide a texture of information that is understood from different proximity to Almono, individual Districts, and individual parcels.

Flexibility in providing temporary signage that integrates public art, historical images, or future site / parcel imagery allows for incremental occupancy over time.

Sustainability and best practices in integrating renewable or reclaimed materials, renewable energy sources, and educational storytelling promotes the aspirational goals of Almono.

Honoring History of Almono promotes the site's history, location, and identity. Forms and materials that previously occupied the site, materials previously manufactured on site, the site's proximity to the river and adjacent neighborhoods, as well as view corridors downtown may all be integrated.

Location and Position of signs should create a cohesive and unified look to the district. Where possible business signs should align and relate to each other in scale and character.



Wayfinding

Public Art

Multiple Scales

Flexibility

Sustainability

Honoring History

SIGNAGE APPLICATION

Permitted Signage

Almono Signage and Reference Standards

Signage shall comply with the intent of the signage place-making principles and shall meet all other applicable standards established by the City of Pittsburgh Zoning Code Chapter 919, as amended. Dimensional and illumination standards for non-advertising business and identification signs shall be in accordance with the City of Pittsburgh Zoning Code standards referenced on the adjacent table.

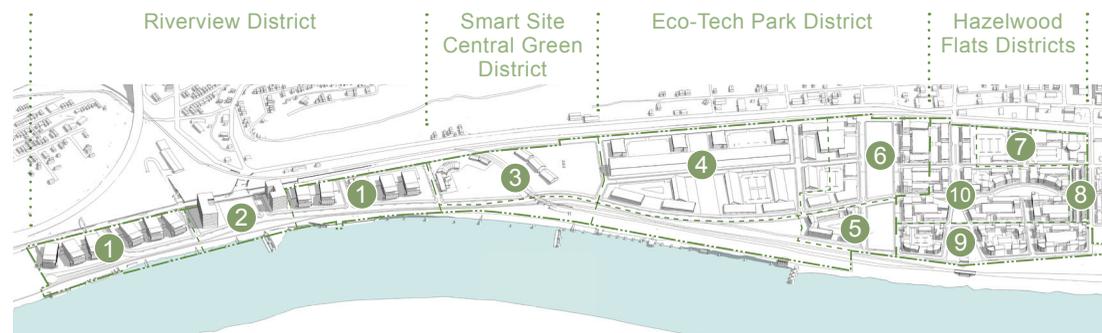
Signs not permitted

- ▶ Advertising signs
- ▶ Electronic non-advertising signs
- ▶ Sign that incorporates motion

Review Process

Applicants shall review signage with any governing land and building covenants, and with any governing land and building owner associations approval prior to City of Pittsburgh Zoning review. The City is not responsible for verification of the owner associations review.

Sub-District Key Plan



Non-Advertising Signage Types Allowed By District - Section 919.03											
Chapter 919.03.M Business and Identification Signage Reference Section	919.03.M.7		919.03.M.6			919.03.M.5				Open Space	
	Riverview	Smart Site Central Green	Eco-Tech Park		Hazelwood Flats						
	RV - Mixed Use A ①	RV - Mixed Use B ②	SCG- Land-Based Industry ③	ETP - LT Industrial ④	ETP - Residential ⑤	ETP - Mixed Use ⑥	HF - Flex ⑦	HF - Residential A ⑧	HF - Residential B ⑨	HF - Mixed Use ⑩	Open Space Sub-Districts
Convenience and Public Information Signage - Sections 919.03.I / 919.03.J											
Wayfinding	•	•	•	•	•	•	•	•	•	•	•
Riverfront	•	•	•	•	•	•	•	•	•	•	•
Placemaking (including 919.03.M8)	•	•	•	•	•	•	•	•	•	•	•
Ground Mounted Signage (Refer to Reference Section per Development District)											
Pylon (Limited to Second Avenue within 10' of the right-of-way)	•	•	•	•	•	•	•	•	•	•	•
Monument	•	•	•	•	•	•	•	•	•	•	•
Wall Mounted Signage (Refer to Reference Section per Development District)											
Building Mural Sign	•	•	•	•	•	•	•	•	•	•	•
Wall Sign	•	•	•	•	•	•	•	•	•	•	•
Canopy Sign	•	•	•	•	•	•	•	•	•	•	•
Window Sign	•	•	•	•	•	•	•	•	•	•	•
Directory (subject to 919.03.D)	•	•	•	•	•	•	•	•	•	•	•
Projecting Signage - Section 919.03.M.8											
Projecting Sign	•	•	•	•	•	•	•	•	•	•	•

SIGNAGE

Convenience and Public Information Signage

Referenced Sections

Convenience and Public Information Signage shall be consistent with City of Pittsburgh Zoning Code Sections 919.03.I and 919.03.J. Where located within the right-of-way, refer to Section 2.1 - Rights-of-Way, for locations designated for signage placement.

Signage types shall be consistent with the Site Systems process described within Section 1.3. Referenced

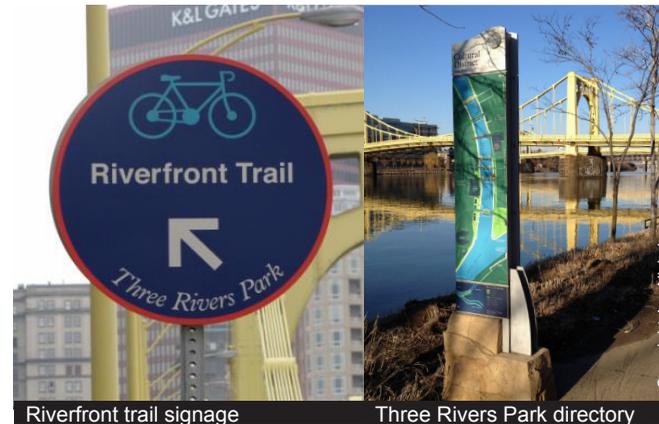
Site Systems include, but are not limited to, Public Art, Cultural Heritage, Open Space, and Bicycle and Pedestrian Networks.

Wayfinding signage will be subject to design review and planning commission approval to ensure that the design will meet City standards.



Wayfinding signage in Braddock

Wayfinding Signage uses consistent graphics and nomenclature to shape an identity for the site, District, and / or place to enhance visitors and residents ability to easily navigate to destinations such as businesses, public spaces, or parking.



Riverfront trail signage

Three Rivers Park directory

Riverfront Signage creates a riverfront identity that leads residents and visitors to the public spaces and trails at the riverfront. Capitalizing upon view corridors strengthen the user's orientation to the river and city.



Southside Slopes gateway project

Placemaking Signage utilizes a combination of text and graphic arts to signify qualities of Almono places, Districts, and open spaces to develop a unique identity recognizable by residents and visitors.

Ground Mounted Signage

Referenced Sections

Ground Mounted Signage shall be consistent with City of Pittsburgh Zoning Code Sections 919.03.M.5 through 919.03.M.7. Refer to Signage Types Allowed by District Table, page 3.3-02, for standards applicable per Almono development District.

Pylon signs are limited to Second Avenue, within 10' of the right-of-way.



Bakery Square business identification ground signage

Pylons serve as an attraction to orient vehicular traffic. The vertical dimension of pylon signs shall be greater than the horizontal dimension and a maximum of one pylon sign shall be permitted per frontage.

If illuminated, pylon signs shall be lit internally.



Slippery Rock University identification ground signage

Monument Signs serve as an identifier of the activity, business, or tenant, of a particular building and are placed between the right-of-way and the building frontage. Monument signs shall be greater in the horizontal dimension than the vertical dimension and if mounted in a yard, shall be parallel or perpendicular to the right-of-way.

Monument signs shall be illuminated externally.

Wall Mounted and Projecting Signage

Referenced Sections

Wall Mounted and Projecting Signage shall be consistent with City of Pittsburgh Zoning Code Sections 919.03.M.5 through 919.03.M.8. Refer to Signage Types Allowed by District Table, page 3.3-02, for standards applicable per Almono development District.



Braddock identification building mural

Building Mural Signage provide visibility from a greater distance. Building mural signs are flat against or painted upon a secondary building facade. The content of building mural signs may either advertise a business or be public art. When the building mural sign advertises a business, additional signage shall be provided at the business entrance.



Wall signage utilizing building corner placement

Wall Signage is viewed from a distance and are typically larger-scaled, painted upon, or applied directly to the facade of a building. Wall signs shall not protrude beyond the roof line or cornice of a building. Wall signs may be coupled with small-scale projecting signs to create visual interest for pedestrians from multiple vantage points.



Canopy signage over a neighborhood business district sidewalk

Canopy Signage creates a traditional storefront setting while also articulating the facade. Canopy signs provide protection from weather for pedestrians and keep storefront interiors shaded and cool in hot weather. They encourage activity and interaction between users in the public realm and storefronts.



Window signage identifying storefront business

Window Signage designates and articulates the location of professional offices and storefronts. Window signs offer a high degree of visibility at the pedestrian scale. Window signs shall be affixed or painted upon the inside of the window, and executed by a professional. Window signs may be repeated on storefronts with multiple divided openings. The storefront entrance shall be clearly designated



Free standing and wall mounted business directory signage

Directory Signage aids in wayfinding by providing the location of activities, businesses, tenants, or occupants of a building or group of buildings. Directory signs shall be legible at the pedestrian scale.

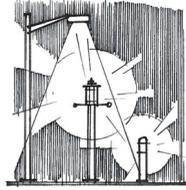
Directory signs may be illuminated internally or externally.

ETP-Residential, HF-Residential A, and HF-Residential Sub-districts are subject to Section 919.03.D.1



Projecting signage along a neighborhood business district

Projecting Signage orients residents and visitors in retail areas. Projecting signs should be pedestrian-scaled and hung at a height to maintain a safe distance between the bottom edge of sign and pedestrians. Projecting signs should be easily read from both sides. Consider creative designs that may evenly employ three-dimensional qualities.



SECTION 3.4 LIGHTING

Placemaking Goals
Lighting Application

3.4 - 01

3.4 - 02

PLACEMAKING GOALS

Almono Lighting Principles

Effective and smart lighting is an essential component in creating a quality urban environment, providing social, economic, and environment benefits. When approached as a comprehensive placemaking process, lighting design may also promote and establish an Almono-specific identity and sense of place.

The following lighting concept principles are identified:

Sustainability Almono promotes the incorporation and use of sustainable technologies that reduce energy consumption and light pollution.

Light Trespass Minimizing light trespass and glare within, at, and beyond Almono's site boundaries by selecting appropriate luminaires based on location, application, and correct installation.

Night Skies Reducing upward night light pollution by incorporating appropriate fixture cut-off angles, preferably through International Dark Skies Association (IDA) approved fixtures.

Wayfinding A comprehensive approach to signage and lighting can help users better navigate spaces, with studies demonstrating that light characteristics play an important role in wayfinding decisions.

Public Art Interactive projects or the focal lighting of art installations activate the public realm. Almono's rich industrial and cultural heritage provide a unique contextual identity that can be experienced from common open spaces located within the site and waterfront trails that face the river.



Decorative overhead street lighting along Walnut Street

Pittsburgh Celebrates Glass and Light installation

Mt. Lebanon Municipal Building Facade Lighting

Referenced and Applicable Documents
Title Twelve - Lighting Code, Chapter 1201 <i>City of Pittsburgh Zoning Code</i>
LEED for Neighborhood Development <i>United State Green Building Council</i>
LED Street Light Research Project <i>Remaking Cities Institute</i>
Streetscape Components Catalogue <i>City of Pittsburgh</i>

SITE LIGHTING APPLICATION

Principles (continued)

Additional placemaking concepts to be considered as part of a comprehensive lighting framework:

Adjustable Intensities incorporate dimmers that modify levels in response to context-specific locations. Examples include mixed-use areas that warrant different intensities than residential areas or lighting that adjusts for special events.

Adjustable Color and Temperature

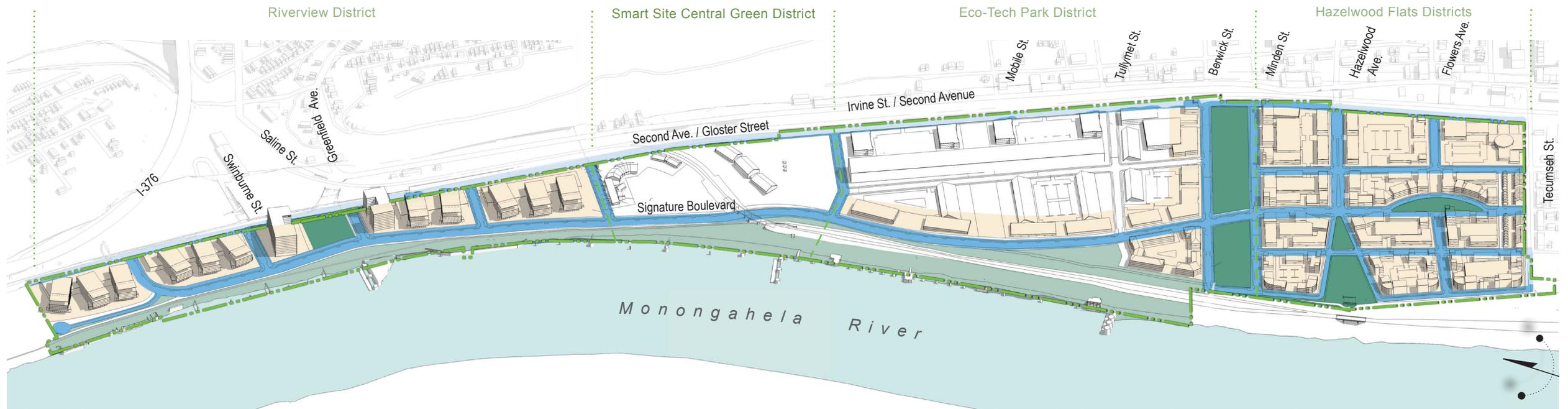
incorporates luminaires that change color (red, blue, green) and/or temperature range (warm to cool) in response to location or for specific points of interest in common open spaces.

Application

The PLDP document recommends the adopted City of Pittsburgh fixtures for use on streets, in mixed-use areas, and along riverfront trails as the baseline

standard. To align with the aspirations of the vision, consideration of contemporary and context-specific luminaire design is encouraged.

Lighting applications may change based on revisions to the City's recently adopted Lighting Code and the current ongoing PlanPGH comprehensive planning process.



- Neighborhood Standard
- Pedestrian Standard
- Pedestrian Standard
- Waterfront Standard
- Almono Site Property Line
- District Boundary



SECTION 4.1 IMPLEMENTATION

Development Timeline	4.1 - 02
Community Engagement	4.1 - 03
Land Operations	4.1 - 04
Integrated Development	4.1 - 05
Initial Phase	4.1 - 07
Administration	4.1 - 11

DEVELOPMENT TIMELINE

Process and Timeline

Almono LP intends to prepare this currently vacant site to receive development. As the site developer, Almono LP is simultaneously pursuing three scopes of work: land operations, initial phase infrastructure development, and SP district zoning.

The timeline below indicates the anticipated development sequence and schedule to accomplish the Partnerships goal of facilitating multiple initial potential building developments on the site by 2014.

Land Operations

This scope of work includes site grading to re-distribute, place, and grade fill that has been brought to site over the last 8 years based on the existing land operation permit. The new grading will bring the site within 1-2 feet of the anticipated final grade.

Initial Phase Infrastructure

This scope of work will establish access to the site and the initial infrastructure to serve building development. Almono LP will prepare an initial subdivision plan that

identifies the initial roadway network and building sites over the first and second quarter of 2013, to start construction in summer of 2013.

Zoning

This document is the Preliminary Land Development Plan for the Almono Specially Planned (SP) zoning district. Developers will submit Final Land Development Plans to demonstrate compliance with the requirements of the SP District following its adoption in 2013.

Development Timeline	2013				2014			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Land Operations	▶ Continued Land Operations							
Initial Phase Infrastructure		Initial Phase Design and Subdivision	▶ Initial Phase Infrastructure Construction ▶ Solicit and Assess Development Proposals			▶ Vertical Construction		
Zoning	▶ SP District Document Submission and Approval ▶ Continued Community Engagement				▶ Review Initial Final Land Development Plan			

COMMUNITY ENGAGEMENT

Outreach and Engagement

Almono LP is committed to an engagement process with the community during the development process as evidenced by the outreach efforts to date.

Community Meetings

Since the start of the vision process in 2010 Almono LP and the consultant team have participated in over 80 meetings across the communities of proximity, leadership, interest, and service, as well as with potential interested property developers. This framework for diverse social engagement was established at the outset of the vision and has been continued to the present date.

Six public meetings were held at various locations in the community, with the most recent community meeting

addressing the SP Zoning request. Almono has also provided a hard copy of the PLDP to be placed in the Hazelwood Initiative office for community residents to review which will be updated as the PLDP is approved.

Community Outreach

In addition to meetings, a website for the project has been established that gives information about the vision and the plans for site development. Almono LP regularly attend meetings for the local community development organizations and continue to meet with parties that are interested in learning about the project.

Additional media platforms that have been and continue to distribute project information include: radio, television, newspaper, the Hazelwood Homepage, and twitter.

Workforce Development

Almono LP is working with City, County, and community leaders to establish a workforce development center in the community to connect residents to resources, training programs, and ultimately jobs that become available in the development and construction of the site.

As an early effort to provide jobs to neighborhood residents Almono employed a crew of youth ages 18-24 to clear and maintain areas of the site.

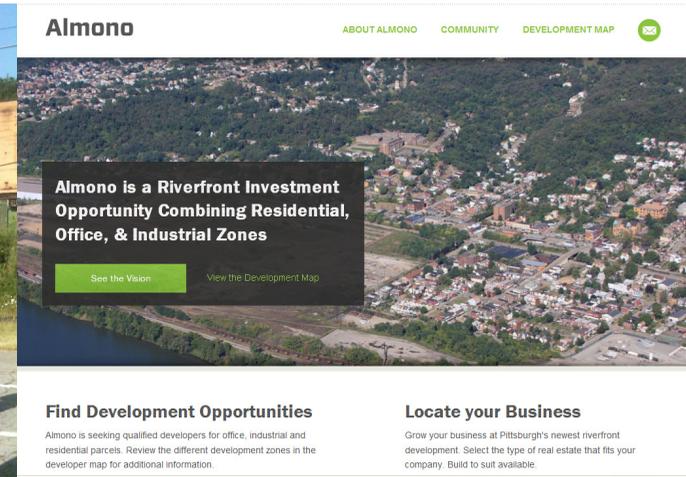
Almono LP is committed to meeting the City's targets for minority participation in the construction activities herein pursued.



Almono 2012 Hazelwood Youth Site Maintenance Crew



Hazelwood Trail Opening Outreach Efforts



Almono.org website

LAND OPERATIONS

Preparing the Site

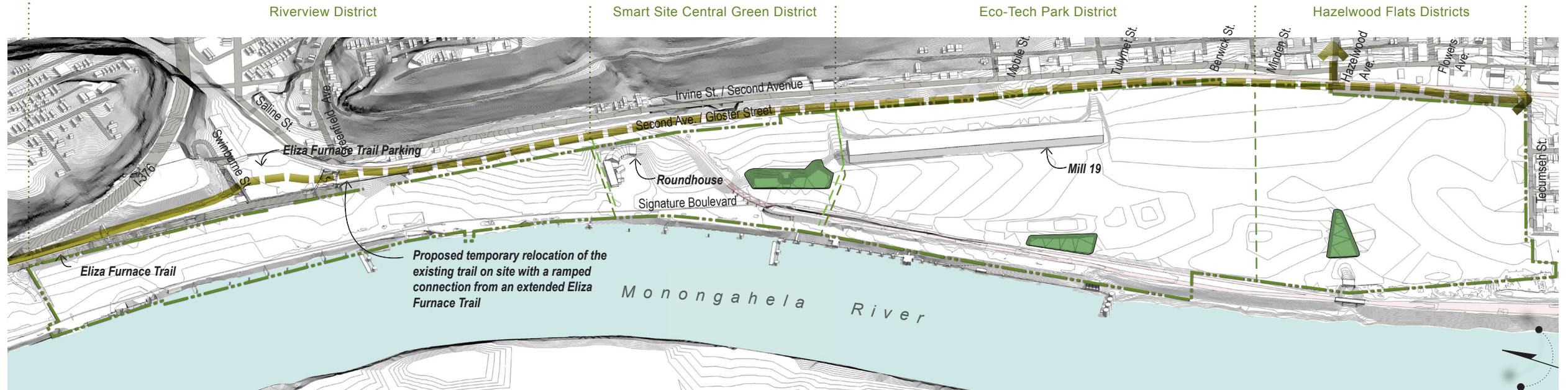
The initial phase of development intends to prepare the site for immediate development needs, while retaining a long-term vision and preparing for continued investment. These preparations range from selective demolition to pre-construction stormwater management to relocation of existing infrastructure.

Almono LP currently holds a Land Operations permit. Planning for the site preparation work detailed below has begun and the work will be undertaken under the existing permit.

Ongoing land operations on the site include the demolition of miscellaneous small buildings and foundations and the distribution of existing soil stockpiles to establish the initial grade.

Prior to beginning the land operations stage, the existing trail through the site will be relocated by establishing continuity of the Eliza Furnace trail onto Second Avenue through the site and then into the neighborhood. With the initial phase of infrastructure development the trail will be relocated along the signature boulevard.

The erosion and sedimentation control plan identifies and establishes three basins to store and treat pre-ill be placed to align with future open space where possible. As the site is developed the distributed stormwater system described in Chapter 3 will be implemented.



- Erosion and Sedimentation Control Basin
- Almono Property Line
- Temporary Trail Relocation
- District Boundary

INTEGRATED DEVELOPMENT

Developing Types of Land Together

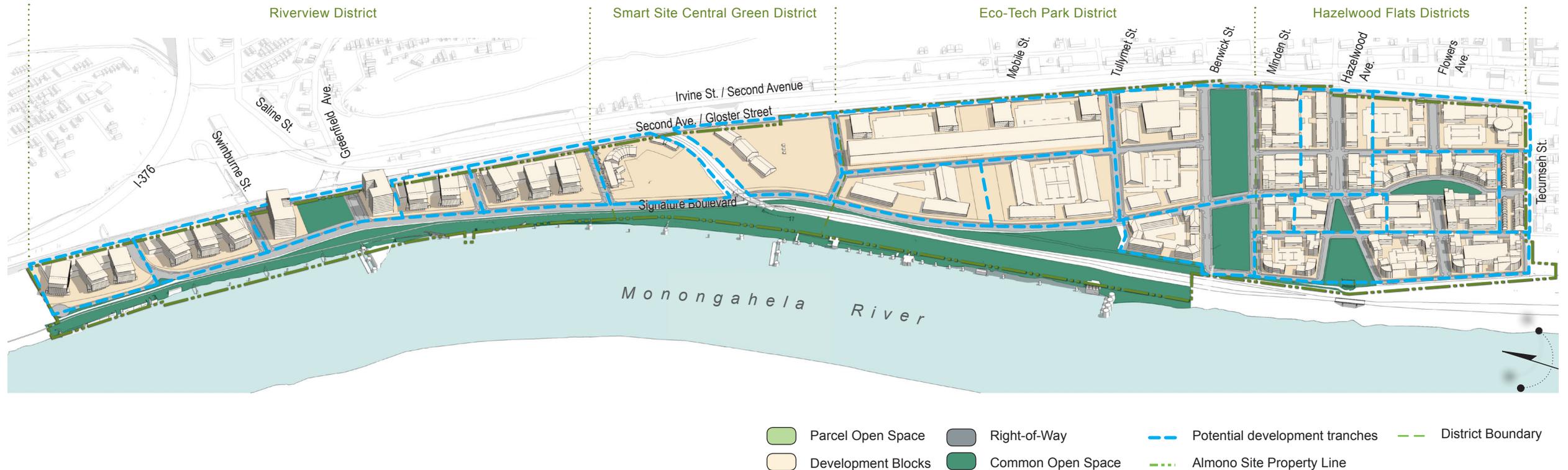
Almono LP anticipates that development on this site will be on-going and that this SP process sets forth an appropriate path for integrated urban development of this industrial property into higher and better uses. During this time development will happen to meet market demand. This will occur over numerous phases that will each include rights-of-way, open spaces, and building development. These components and their individual operating structures must be fully integrated to achieve the placemaking and urban design goals of this SP district.

To achieve integrated site development the following considerations should be given for site development:

- ▶ Development phases should be divided along alleys or way
- ▶ Develop both sides of the street simultaneously where possible
- ▶ Bracket open spaces with development to get nodes of activity

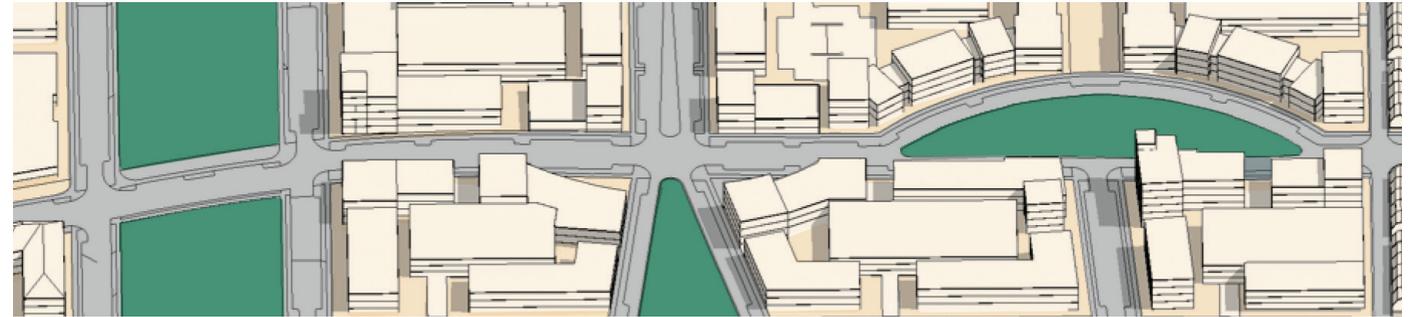
The diagram below indicates potential development trenches in alignment with the integrated design considerations.

The actual development sequence will be based on market demand.



Ultimate Disposition of Land

To initiate this dialog the intended disposition for each land typology is outlined to give a clear expectation of roles, responsibility, and time frame as development is pursued.



Rights-of-Way

Phasing:

Almono LP will pursue initial infrastructure. Rights-of-way will be established at stages appropriate to serve and extend the development of parcels. Components within the right-of-way may also be phased based on development density and economic architecture.

Intent of Final Disposition:

All rights-of-way are intended to be public, dedicated and accepted by the City of Pittsburgh. Each FLDP will determine interim conditions.

Open Space

Phasing:

Due to the large size of the site, the intent of Almono LP is that usable, interim open space be designed and developed before final design and construction of the open space and shall be reviewed and approved as an FLDP.

A plan for the usable, interim open space, covering 10% of the total area of the SP district, shall be designed and approved concurrent with the first FLDP for building construction. The construction of the interim open space shall begin within 6 months of the date of the approval of the first FLDP by the Planning Commission.

The 10% required open space shall be completed in interim form by the time of approval of 50% of the Development Blocks identified in the PLDP. The intent of interim open space is to provide graded and vegetated space that is accessible by the general public and to utilize both interim and final open space for storm water management facilities. The final design and construction of the required open space shall be completed at the time of completion of 75% of the Development Blocks identified in the PLDP.

Intent of Final Disposition:

Almono LP will work with the City and parcel developers to determine ownership and maintenance parameters for the open space through the FLDP process.

Building Development Sites

Phasing:

Almono LP will issue, solicit, and assess development proposals for site areas. They will entertain inquiries from businesses and developers interested in all locations across the site.

Intent of Final Disposition:

Building parcels will be developed by others and privately held by individual owners and developers. An ownership association will be formed by Almono LP.

INITIAL PHASE

Rights-of-Way

Intent:

The intent of the initial infrastructure phase is to establish an initial road network that will unlock the development potential of the site. The construction of the Signature Boulevard not only creates access, it also establishes a riverfront presence for the site during the first phase.

On-site Rights-of-Way

During the initial phase, Almono LP will pursue the construction of a portion of the Signature Boulevard and a

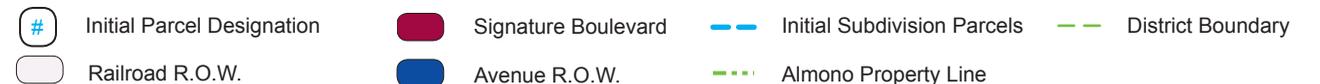
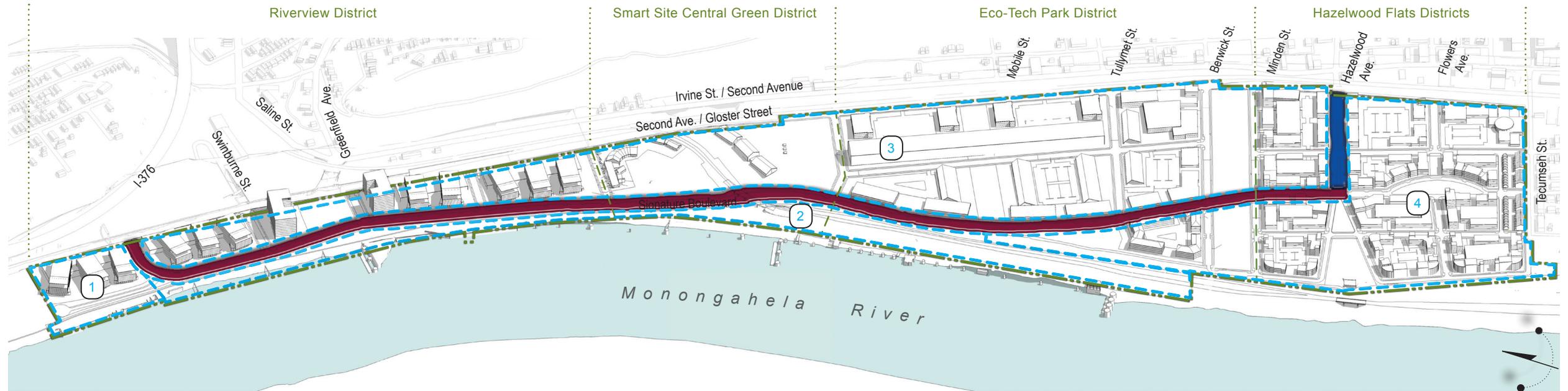
portion of Hazelwood Avenue for vehicular and trail access through the site. The components of the Signature Boulevard will be phased. The right-of-way development will be established fully as density warrants.

Off-site Right-of-Way Improvements

Almono LP will pursue off-site improvements as approved by the City of Pittsburgh and PennDOT. They will work with the City and PennDOT to develop final designs and establish a construction sequence.

Initial Subdivision

Along with the creation of initial rights-of-way, the site will be initially subdivided into a series of parcels separated by the Signature Boulevard and Hazelwood Avenue.



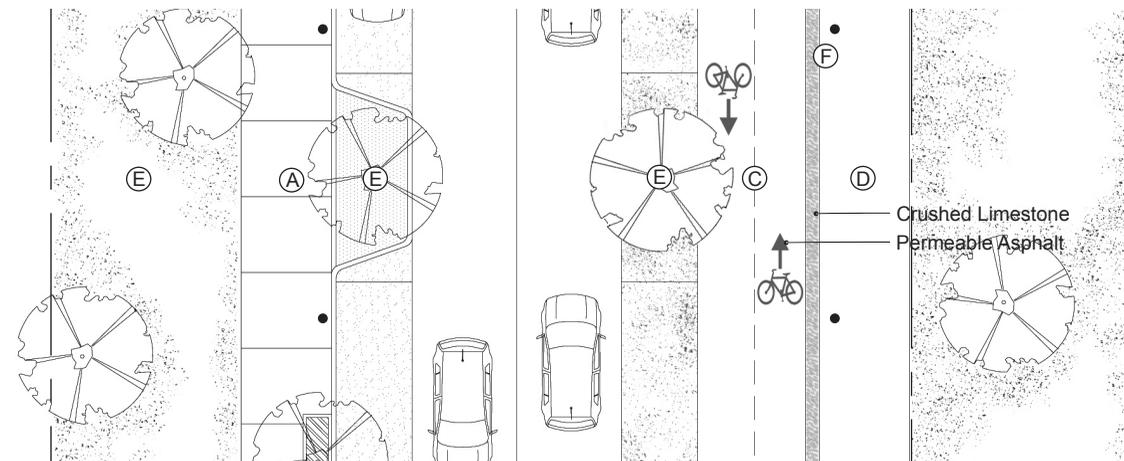
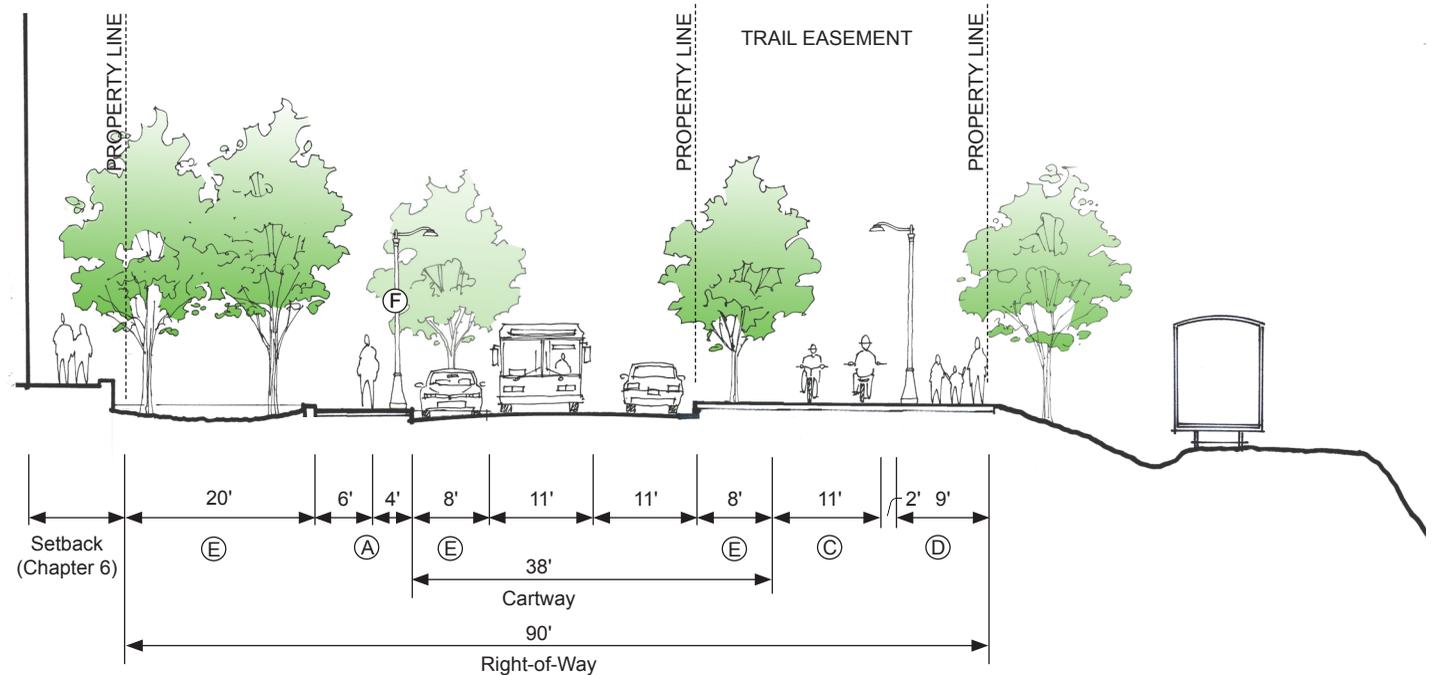
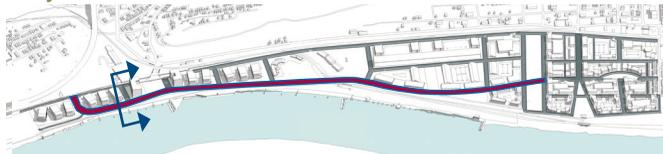
INITIAL PHASE

90-Foot Right-of-Way

This assembly represents one approach to the initial phase of the signature boulevard. The actual design and scope of work is dependent on development financing and construction sequencing.

RIGHTS-OF-WAY ASSEMBLY	
General	
Movement Type	Low
Design Speed	30 mph
A. Sidewalk Zone	
Building Facade Zone	Refer to Chapter 6
Pedestrian Zone	6'
Street Tree / Furniture Zone	4'
B. Intersection and Curb Zone	
Sidewalk planter	Refer to components
C. Bicycle Component	
Buffered Cycle Track	11'
D. Trails Component	
Pedestrian Path	9'
E. Low Impact Design Component	
Meadow and trees at future	20'-0"
Parking Lane Bulb outs	8'
F. Site Lighting Component	
Thoroughfare	Refer to components

Key Plan



INITIAL PHASE

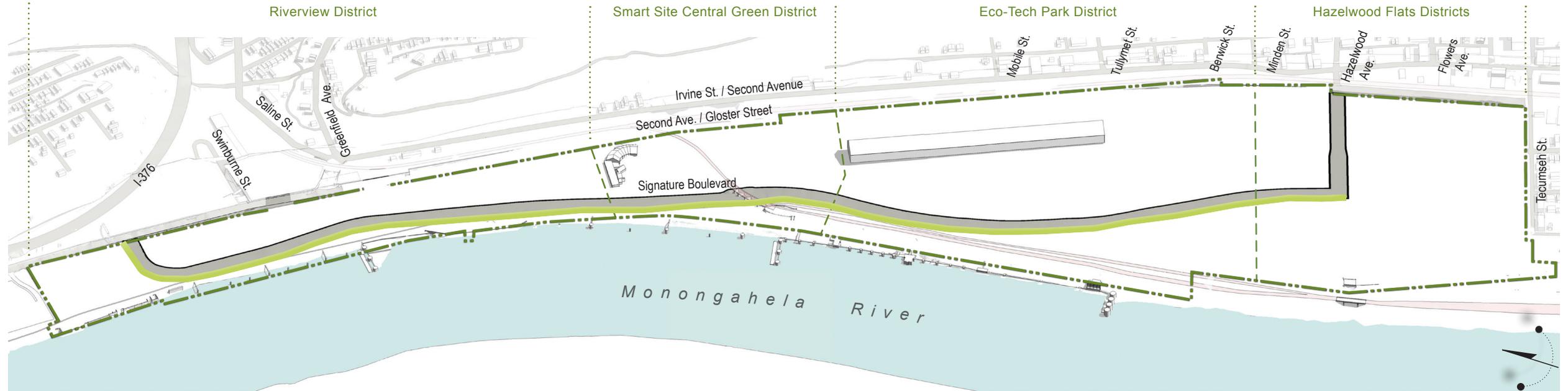
Open Space

Intent:

The initial open space will establish riverfront access adjacent to the initial right-of-way and establishes pedestrian and bike access near the river and across the site. The remaining common land will be stabilized for future development.

Land Stabilization:

The land stabilization procedure will depend on the duration of time it is anticipated to be unoccupied. If development is anticipated within a year the site will be seeded. Development sites that are not anticipated to be developed within the first five years maybe considered as a site for the planting and growing of trees to be relocated and used elsewhere on site in future development phases.

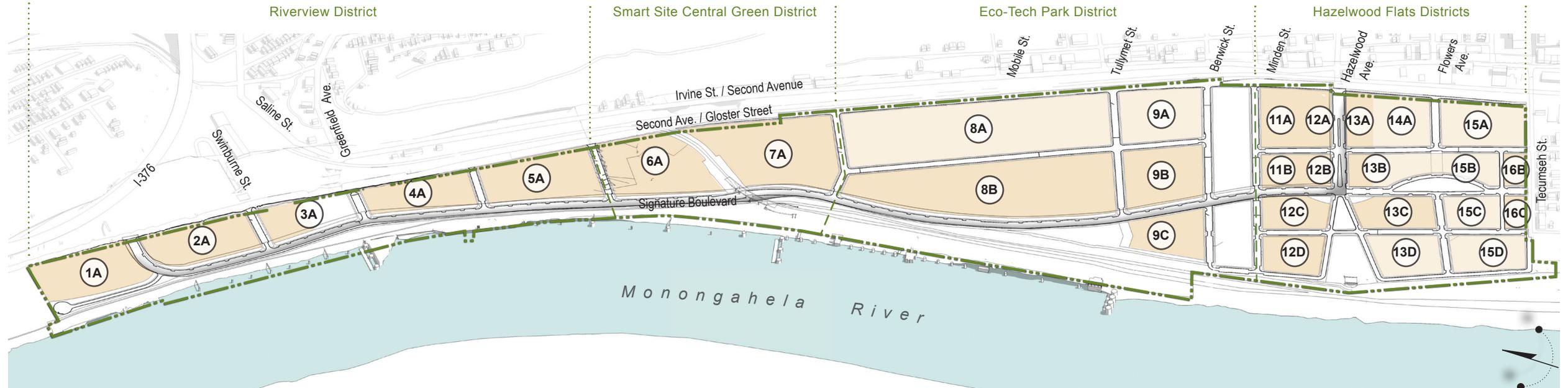


INITIAL PHASE

Development Parcels

Intent:

The initial infrastructure plan creates access to nearly all development parcels with approximately 68.9 acres of land accessible for buildings.



- Initial Development Sites
- Future Development Sites
- Almono Site Property Line
- District Boundary

ADMINISTRATION

Transportation Planning

The initial infrastructure plan and off-site improvements are based on the estimated number of trips within the first five years of development.

As on site development continues, the transportation plan will be reevaluated. Since the pace of development and the actual modal split cannot be predicted, utilizing trip volume as a metric to establish a threshold for revisiting the transportation planning will ensure that transportation improvements keep pace with development patterns. Developers shall submit anticipated trip volumes to City

Planning as part of their FLDP submission. When the total site trips reaches 95% of the cumulative approved trips, the developer will initiate a transportation study. The first step is to look at the actual transportation patterns relative to the approved trips. The next step is to pursue a comprehensive transportation planning study based on the anticipated second phase of development.

Developers should utilize the chart on the subsequent page for their submission. Trips shall be based on the International Transportation Engineers (ITE) standards.

The Department of City Planning will maintain the running tally of trips for their use in submitting anticipated trip volumes for each FLDP submission.

The trips included in the approved initial phase are outlined in the charts below.

TABLE 1
TRIP GENERATION SUMMARY - PHASE I
WITH 6% PENNDOT MULTI-MODAL REDUCTION ⁽¹⁾
Proposed ALMONO LTV Development Master Plan Study
City of Pittsburgh, Allegheny County, Pennsylvania

Development Component	Size	ITE Land Use Code	Weekday Average Daily Traffic	Trip Generation ⁽²⁾					
				A.M. Peak Hour			P.M. Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Residential - Apartment	156 units	220	1,005	15	60	75	63	34	97
Residential - Condo/Townhome	249 units	230	1,338	17	84	101	80	39	119
Community Center	0 s.f.	495	0	0	0	0	0	0	0
General Office	296,000 s.f.	710	2,892	370	50	420	65	320	385
Retail	0 s.f.	820	0	0	0	0	0	0	0
Specialty Retail	0 s.f.	814	38	0	0	0	0	0	0
Industrial Park	304,645 s.f.	130	2,123	199	44	243	58	219	277
TOTAL ALMONO LTV SITE GENERATED TRIPS			7,396	601	238	839	266	612	878

(1) Multi modal reduction determination utilized methodologies presented in the Pennsylvania Department of Transportation, *Policies and Procedures for Transportation Impact Studies*, January 28, 2009. Based on the methodologies, a total of 6% reduction was applied to the residential development components (Apartment and Condo/Townhome) and business development components.

(2) Total number of vehicle trips generated determined through the use of methodologies presented in *Trip Generation*, Eighth Edition published by the Institute of Transportation Engineers (ITE).

TABLE 2
TRIP GENERATION SUMMARY - PHASE I
WITH 6% PENNDOT MULTI-MODAL REDUCTION ⁽¹⁾
Proposed ALMONO LTV Development Master Plan Study
City of Pittsburgh, Allegheny County, Pennsylvania

Development Component	Size	ITE Land Use Code	Trip Generation ⁽²⁾					
			AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Riverview								
Residential - Apartments	0 units	220	0	0	0	0	0	0
Residential - Condo/Townhomes	0 units	230	0	0	0	0	0	0
Office	296,000 s.f.	710	370	50	420	65	320	385
Retail	0 s.f.	820	0	0	0	0	0	0
<i>Riverview Total</i>			<i>370</i>	<i>50</i>	<i>420</i>	<i>65</i>	<i>320</i>	<i>385</i>
Smart Site								
Industrial Park	0 s.f.	130	0	0	0	0	0	0
<i>Smart Site Total</i>			<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Eco Tech								
Industrial Park	224,645 s.f.	130	147	33	180	43	162	205
<i>Eco Tech Total</i>			<i>147</i>	<i>33</i>	<i>180</i>	<i>43</i>	<i>162</i>	<i>205</i>
Hazelwood Homes								
Residential - Apartments	156 units	220	16	60	76	63	32	95
Residential - Condo/Townhomes	249 units	230	16	83	99	79	40	119
Office	0 s.f.	710	0	0	0	0	0	0
Specialty Retail	0 s.f.	814	0	0	0	0	0	0
Community Center	0 s.f.	495	0	0	0	0	0	0
Industrial Park	80,000 s.f.	130	52	12	64	16	58	74
<i>Hazelwood Homes Total</i>			<i>84</i>	<i>155</i>	<i>239</i>	<i>158</i>	<i>130</i>	<i>288</i>
TOTAL ALMONO LTV SITE TRIP GENERATION			601	238	839	266	612	878

(1) Multi modal reduction determination utilized methodologies presented in the Pennsylvania Department of Transportation, *Policies and Procedures for Transportation Impact Studies*, January 28, 2009. Based on these methodologies, a total of 6% reduction was applied to the residential development components (Apartment and Condo/Townhome) and business development components.

(2) Total number of vehicle trips generated determined through the use of methodologies presented in *Trip Generation*, Eighth Edition published by the Institute of Transportation Engineers (ITE).

ADMINISTRATION

TRIP GENERATION CALCULATION GUIDELINES FOR ALMONO SITE COMPONENTS

STEP 1: CALCULATE TOTAL ANTICIPATED SITE GENERATED TRAFFIC VOLUMES ⁽¹⁾

(FILL IN BLANK TABLE TO THE RIGHT)

Development Component	Size ⁽²⁾	ITE Land Use Code	Weekday Average Daily Traffic	Trip Generation Equation or Rate to Calculate the Number of Trips (T) ⁽³⁾						Development Component	Size	ITE Land Use Code	Weekday Average Daily Traffic	Anticipated Trip Generation Based on Formulae and Rates Presented in Step 1							
				A.M. Peak Hour			P.M. Peak Hour							A.M. Peak Hour			P.M. Peak Hour				
				Equation or Rate		Directional Distribution		Equation or Rate						Directional Distribution		Enter	Exit	Total	Enter	Exit	Total
				Enter	Exit	Enter	Exit	Enter	Exit												
Residential - Apartment	X units	220	$T = 6.06(X) + 123.56$	$T = 0.49(X) + 3.73$	20%	80%	$T = 0.55(X) + 17.65$	65%	35%												
Residential - Condo/Townhome	X units	230	$T = e^{(0.67 \ln(X) + 2.46)}$	$T = e^{(0.80 \ln(X) + 0.26)}$	17%	83%	$T = e^{(0.82 \ln(X) + 0.32)}$	67%	33%												
Community Center	X k.s.f.	495	$T = 22.86(X)$	$T = 1.62(X)$	61%	39%	$T = e^{(0.58 \ln(X) + 2.21)}$	37%	63%												
General Office	X k.s.f.	710	$T = e^{(0.77 \ln(X) + 3.65)}$	$T = e^{(0.80 \ln(X) + 1.55)}$	88%	12%	$T = 1.12(X) + 78.81$	17%	83%												
Retail	X k.s.f.	820	$T = e^{(0.65 \ln(X) + 5.83)}$	$T = e^{(0.59 \ln(X) + 2.32)}$	61%	39%	$T = e^{(0.67 \ln(X) + 3.37)}$	49%	51%												
Specialty Retail	X k.s.f.	814	$T = 42.78(X) + 37.66$	$T = 0.00(X)$	0%	0%	$T = 2.40(X) + 21.48$	44%	56%												
Industrial Park	X k.s.f.	130	$T = 4.96(X) + 747.75$	$T = e^{(0.77 \ln(X) + 1.09)}$	82%	18%	$T = 0.77(X) + 42.11$	21%	79%												

(1) Trip generation equations and rates provided from the *Trip Generation*, Eighth Edition published by the Institute of Transportation Engineers (ITE).
 (2) "X" denotes the number of development units or square footage per 1,000 square feet (for example, 100,000 s.f. = 100 k.s.f.)
 (3) "T" denotes the total number of trip ends, which is determined from the calculated equation or rate. First calculate the total number of trip ends per development component (T) and then apply the directional distribution per development component to the calculated "T". Fill in Table to the right.

STEP 2: APPLY PENNDOT MULTI-MODAL TRIP REDUCTION ⁽⁴⁾

(FILL IN BLANK TABLE TO THE RIGHT)

Development Component	Multi-Modal Percentage To Be Applied to the Calculated Number of Trips from Step 1	Development Component	Size	ITE Land Use Code	Weekday Average Daily Traffic	Anticipated Trip Generation With Multi-Modal Trip Reduction									
						A.M. Peak Hour			P.M. Peak Hour						
						Enter	Exit	Total	Enter	Exit	Total				
Residential - Apartment	6%														
Residential - Condo/Townhome	6%														
Community Center	0%														
General Office	6%														
Retail	6%														
Specialty Retail	6%														
Industrial Park	0%														

(4) Multi-modal reduction determination utilized methodologies presented in the Pennsylvania Department of Transportation, *Policies and Procedures for Transportation Impact Studies*, January 28, 2009. Based on the methodologies, a total of a 6% reduction can only be applied to the residential development components (Apartment and Condo/Townhome) and business development components (Office, Retail, and Specialty Retail). To calculate the anticipated number of site generated trips with a multi-modal reduction, multiply a trip reduction factor of 0.94 (1.00-0.06=0.94) to the calculated trip ends from Step 1. Fill in the Table to the right.

To calculate the anticipated number of site generated trips with a multi-modal reduction, multiply a trip reduction factor of 0.94 (1.00-0.06=0.94) for each corresponding development component (see Step 2 Table to the left) to the calculated trip ends from Step 1 (see Step 1 Table above).

STEP 3: APPLY INTERNAL (CAPTURE) TRIP REDUCTION ⁽⁵⁾

(FILL IN BLANK TABLE TO THE RIGHT)

Development Component	Internal (Capture) Trip Percentage To Be Applied to the Calculated Number of Trips from Step 2 ⁽⁶⁾	Development Component	Size	ITE Land Use Code	Weekday Average Daily Traffic	Anticipated Trip Generation With Internal (Capture) Trip Reduction									
						A.M. Peak Hour			P.M. Peak Hour						
						Enter	Exit	Total	Enter	Exit	Total				
Residential - Apartment	2%														
Residential - Condo/Townhome	2%														
Community Center	2%														
General Office	2%														
Retail	2%														
Specialty Retail	2%														
Industrial Park	0%														

(5) The internal (capture) trip reduction percentage was determined through the methodologies presented in the ITE, *Trip Generation Handbook, Second Edition*. Based on internal (capture) percentages calculated for the proposed Almono Master Plan, a minimum of 2% internal (capture) is forecasted to occur in the proposed SP District for all development components, excluding Industrial Park.
 (6) An internal (capture) trip reduction should only be applied where there is a combination of residential, retail, and/or office development components. If there is no combination of development components, an internal (capture) trip reduction should NOT be applied.

To calculate the anticipated number of site generated trips with internal (capture) trip reduction, multiply a trip reduction factor of 0.98 (1.00-0.02=0.98) for each corresponding development component (see Step 3 Table to the left) to the calculated trip ends with multi-modal trip reduction from Step 2 (see Step 2 Table above). It should be noted that an internal (capture) trip reduction can ONLY be applied when there is a combination of residential, retail, and/or office development components. If there is no combination of development components, an internal (capture) trip reduction CANNOT be applied, and the trip generation results in Step 2 are the final trip generation volumes.

Source: Summary by Trans Associates.

